

LITEON

Optoelectronics
Product Solution SBU

PATH TO THE FUTURE

A world-class
Optoelectronic Solution Provider





Creating Infinite Possibilities

For a Bright Future

LITEON Optoelectronics Product Solution SBU (LITEON OPS) is a worldwide leading provider of optoelectronic semiconductors. Our leading role is backed by the broadest and most widely varying product offering in Optical technologies, ranging from illumination to sensing, from low power to high power, from commodity to custom-made, from LED to Laser, from visible lights to infrared & UV.

As an experienced supplier in professional packaging designing and manufacturing, LITEON OPS not only has been able to provide customers with high-quality optoelectronic component solutions, but also has been constantly pursuing high-performance and low-pollutant light sources that make lives Smarter, Safer and Greener.

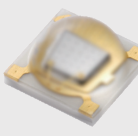
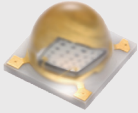
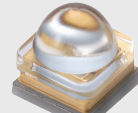
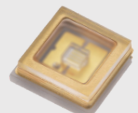
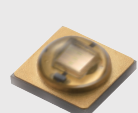
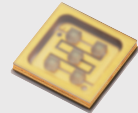
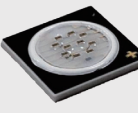
Together, we work to enrich lives and shape the future!

For more information, please visit us online at www.liteon.com/opto

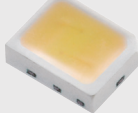
Table of Contents

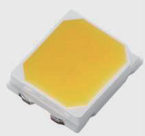
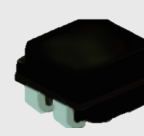
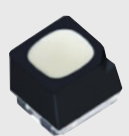
UV LED	02
Lighting LED	02
SMD LED	04
Automotive LED	06
LED Display	08
Through Hole LAMP	09
Optical Sensors	10
VESEL	12
Infrared Emitter and Detector	12
Photocoupler	15
Branch Offices	17

UV LED

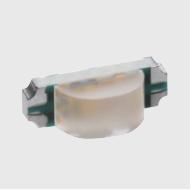
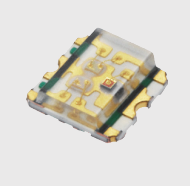
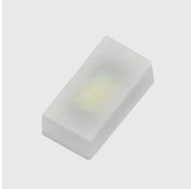
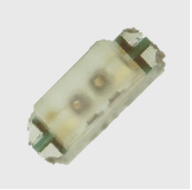
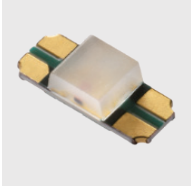
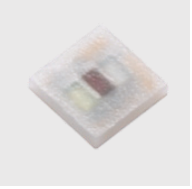
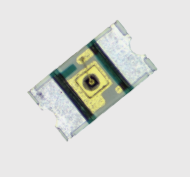
Ceramic UVA	LTPL-C16UVM	1.6(L)x1.6(W)x0.8(H)mm	Ceramic UVA	LTPL-C034UVG	3.45(L)x3.45(W)x2.1(H)mm
	• CSP-ceramic based. • Low power. • Miniature size package. • Long life time. • High efficiency. • Low CO2 consumption. • 365nm: 19mW at 20mA. • 385nm: 23mW at 20mA. • 405nm: 25mW at 20mA.	• Resin/Ink curing. • Tooth whitening. • Money & ID detect. • Forensic applications. • Fluorescent light source.		• Ceramic based. • High power dome lens. • Higher WPE%. • Long life time. • High efficiency. • Low CO2 consumption. • 365nm: 1380mW at 700mA. • 385nm: 1420mW at 700mA. • 405nm: 1455mW at 700mA.	• Tanning. • Resin curing. • Tooth whitening. • Security, banknote. • Forensic applications. • Fluorescent light source.
Ceramic UVA	LTPL-C036UVG	3.45(L)x3.45(W)x3.2(H)mm	Ceramic UVA	LTPL-S35	3.45(L)x3.45(W)x2.8(H)mm
	• Ceramic based. • High power dome lens. • Higher WPE%. • Long life time. • High efficiency. • Narrow view angle 55 degree • 365nm: 1240mW at 700mA. • 385nm: 1275mW at 700mA. • 405nm: 1305mW at 700mA.	• Tanning. • Resin curing. • Tooth whitening. • Security, banknote. • Forensic applications. • Fluorescent light source.		• Ceramic based. • Ultra-high power dome lens. • Higher WPE%. • Long life time. • High efficiency. • Low CO2 consumption. • S35FL view angle 120 degree. • S35FT view angle 60 degree. • S35CT view angle 30 degree. • 365nm: 1400mW at 1A.	• Resin curing. • Tooth whitening. • Forensic applications. • Fluorescent light source.
Ceramic UVC	LTPL-G35UVC	3.5(L)x3.5(W)x1.68(H)mm	Ceramic UVC	LTPL-W35UVC	3.5(L)x3.5(W)x1.65(H)mm
	• Ceramic based. • Quartz glass. • Long life time. • High efficiency. • Low CO2 consumption. • 2kV ESD protection • 275nm: 3mW at 20mA. • 275nm: 17mW at 100mA. • 275nm: 20mW at 120mA. • 275nm: 37mW at 250mA. • 275nm: 50mW at 350mA. • 275nm: 73mW at 600mA.	• Water sterilization. • Surface sterilization. • Air purification.		• Ceramic based • Ultra-high power dome lens. • Long life time. • High efficiency. • Low CO2 consumption. • 275nm: 120mW at 550mA. • 275nm: 150mW at 600mA. • Highest quality and reliability • IP58 • 2kV ESD protection	• Water sterilization. • Surface sterilization. • Air purification.
Ceramic UVC	LTPL-G06UVC	6.0(L)x6.0(W)x1.38(H)mm	COB UVC	LTPL-M08	8.0(L)x8.0(W)x1.23(H)mm
	• Ceramic based. • Quartz glass. • Long life time. • High efficiency. • Low CO2 consumption. • 2kV ESD protection • 275nm: 100mW at 600mA.	• Water sterilization. • Surface sterilization. • Air purification.		• Ceramic based. • Ultra high mW per dollar solution • High efficiency. • Low CO2 consumption. • 2kV ESD protection • 275nm: 140mW at 450mA.	• Water sterilization. • Surface sterilization. • Air purification.

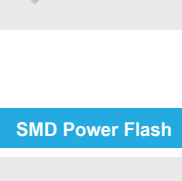
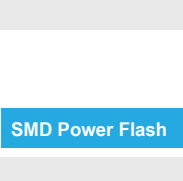
Lighting LED

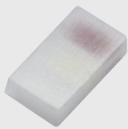
Low Power Lighting	LTW-E608	1.6(L)x0.8(W)x0.55(H)mm	Low Power Lighting	LTW-2016	2.0(L)x1.6(W)x0.65(H)mm
	• Compact Size Topview PLCC package • CRI 70 for all CCTs. • CRI 80 90 is optional. • Wide selection of white CCT's. • Ideal for lighting applications requiring a homogeneous distributed light source. • Rich color flexibility • ANSI compatible chromaticity bins	• Linear light. • Display • Indicator		• Compact Size Top View PLCC Package. • CRI 80 for all CCTs. • CRI 90 is optional. • Wide selection of white CCT's. • Ideal for lighting applications requiring a homogeneous distributed light source. • ANSI compatible chromaticity bins	• Linear light. • Display • Indicator
Low Power Lighting	LTW-2214	2.2(L)x1.4(W)x1.3(H)mm	Low Power Lighting	LTW-K140	3.0(L)x1.4(W)x0.8(H)mm
	• Compact Size Topview PLCC package • CRI 80 for all CCTs. • CRI 90 is optional. • Wide selection of white CCT's. • Ideal for lighting applications requiring a homogeneous distributed light source. • ANSI compatible chromaticity bins	• Linear light. • Display • Indicator		• Top view PLCC Package. • Efficiency: 125lm/W@0.2W. • CRI: 80 for all CCT • CRI 90 is optional. • Wide selection of white CCT's. • Compliance with ENERGY STAR program requirements for SSL luminaires. • Best flexible for modules in need of illuminance uniformity and circuit design. • Ideal for lighting applications requiring a homogeneous distributed light source. • ANSI compatible chromaticity bins • Rich color flexibility	• Linear light. • Display • Indicator

Mid Power Lighting	LTW-2835	2.8(L)x3.5(W)x0.65(H)mm		• Efficiency: 140lm/W@0.5W. • 3V, 6V, 9V. • CRI 80 for all CCTs. • CRI 90 is optioned. • Wide selection of white CCT's. • Compliance with ENERGY STAR program requirements for SSL luminaires. • Ideal for lighting applications requiring a homogeneous distributed light source. • Best choice for high efficiency platform. • Rich color flexibility • ANSI compatible chromaticity bins • Linear light • Ceiling light • Strip light • Bulb • Tube
Mid Power Lighting	LTW-5630	5.6(L)x3.0(W)x0.77(H)mm		• Efficiency: 190lm/W@0.2W. • 3V, 6V • CRI 80 for all CCTs. • CRI 90 is optioned. • Wide selection of white CCT's. • Compliance with ENERGY STAR program requirements for SSL luminaires. • Ideal for lighting applications requiring a homogeneous distributed light source. • Best choice for high efficiency platform. • Linear light • Ceiling light • Strip light • Bulb • Tube
white LED	LTW-010	3.8(L)x0.9(W)x0.4(H)mm		• Side view PLCC package. • High brightness • Special color for chosen: Ice-blue, Sky-blue, Tiffany, Amber, Purple. • Backlight • Indicator
white LED	LTW-012	4.2(L)x0.9(W)x0.45(H)mm		• Side view PLCC package. • High brightness. • Low power. consumption. • Backlight • Indicator
white LED	LTW-303	3.0(L)x0.85(W)x0.3(H)mm		• Side view PLCC package. • High brightness. • Narrow slim thickness • Backlight • Indicator
RGB LED	LTW-008RGB2	4.5(L)x1.25(W)x0.9(H) mm		• Side view PLCC package. • High brightness. • Rich color flexibility • RGB white binning • Ambient light • Display • Indicator
RGB LED	LTW-010RGB	3.8(L)x 0.9(W)x 0.45(H) mm		• Side view PLCC package. • High brightness. • Rich color flexibility • RGB white binning • Narrow slim thickness • Ambient light • Display • Indicator
RGB LED	LTW-B1010RGBN	1.0(L)x1.0(W)x0.85(H) mm		• Top view PLCC package. • High brightness, low power consumption. • Rich color flexibility • Black PKG. • Ambient light • Display • Indicator • Signboard
RGB LED	LTW-OB1515RGBN	1.6(L)x1.54(W)x1.56(H) mm		• Top view PLCC package. • Smaller size. • High brightness, low power consumption. • Rich color flexibility • Black surface • Ambient light • Display • Indicator • Signboard
RGB LED	LTW-Q35ZRGB	3.5(L)x3.2(W)x0.65(H) mm		• Top view PLCC package. • High brightness. • Rich color flexibility. • Ambient light • Display • Indicator
RGBW LED	LTW-Q35RGBW	3.5(L)x3.2(W)x0.65(H) mm		• Top view PLCC package. • High brightness • Rich color flexibility • Nature white to solve RGB-white color uneven in light guide tube. • Ambient light • Display • Indicator
RGB LED	LTPL-P033RGB	7.4(L)x5.0(W)x1.3(H) mm		• Top view PLCC package. • 1W high power RGB • Good thermal management • Ambient light • Display • Indicator

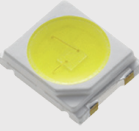
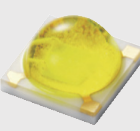
SMD LED

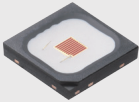
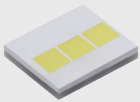
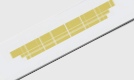
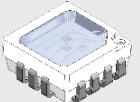
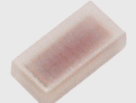
SMD Chip IC Embedded	LTST-E133	1.3(L)x1.3(W)x0.4(H) mm		• Top view IC built-in solution. • Available at 5mA and 12mA. • Simplified PCB design. • Free passive component. • Saving SMT & maintain cost • Better consistency of color mixing. • Extreme small power consumption.	• Consumer devices. • LED decorative lighting. • Display lights. • Signal and symbol luminary.
SMD Chip IC Embedded	LTST-S313	3.2(L)x1.5(W)x1.0(H)mm		• Side view IC built-in solution. • Available at 5mA and 12mA. • Ultra Bright InGaN / AlInGaP Chip LED. • 3 channel output with 8 Bits IC driver. • Each of the colors can achieve 256 brightness steps and scan frequency is no less than 100 KHz.	• Gaming backlighting. • Display. • Indicator lights for portable devices.
SMD Chip IC Embedded	LTST-S203	2.0(L)x1.0(W)x0.5(H)mm		• Smallest side view IC built-in solution. • Available at 5mA. • Ultra Bright InGaN / AlInGaP Chip LED. • 3 channel output with 8 Bits IC driver. • Each of the colors can achieve 256 brightness steps and scan frequency is no less than 100 KHz.	• RGB keypad and keyboard backlight. • Display. • Indicators of portable devices.
SMD Chip IC Embedded	LTST-C19M	1.6(L)x1.6(W)x0.5(H) mm		• Top View 0606 RGB LED. • RGB Independent control. • Wide viewing angle of 120°.	• Keyboard Backlight. • Indicator lights for gaming applications. • Peripherals.
SMD Chip IC Embedded	LTST-FS02T/LTW-FS02T	1.8(L)x0.68(W)x0.2(H)mm		• Smallest side view ultra-thin single color LED. • Ultra-compact side-view product supporting ultra-bright performances. • Wide viewing angle of 120°. • Available in a variety of colors.	• Consumer devices. • Keypad backlight. • Micro display. • Keyboard backlight.
SMD Chip IC Embedded	LTST-FC03/LTW-FC03	0.6(L)x0.3(W)x0.2(H)mm		• Top View 0201 Ultra-thin single color LED. • High brightness and compact size Chip LED. • Thin-sized chiplet. • Available in a variety of colors.	• Consumer devices. • Keypad backlight. • Micro display. • Keyboard backlight.
SMD Chip LED	LTST-C281	1.0(L)x0.5(W)x0.35(H)mm		• Top View 0402 Ultra-thin single color LED. • Ultra-compact package size suitable for high resolution matrix applications. • Wide viewing angle of 130°. • Available in a variety of colors.	• Mobile keypad backlight. • Compact mobile equipment. • Display.
SMD Mini ChipLED RGBW	LTST-FC12	1.2(L)x1.2(W)x0.4(H)mm		• Top View 0505 RGBW 4-in-1 LED. • Tunable white at any color temperature.	• Gaming backlight. • Micro display. • Consumer devices.
SMD Chip LED Dual Color	LTST-S225 / LTW-S225	2.0(L)x1.1(W)x0.6(H) mm		• Side View 1208 Bi-Color LED. • Smallest side view bi-color package. • Wide viewing angle 130°.	• Consumer devices. • Networking indicator lights.
SMD Chip Full Color	LTST-C25T	3.2(L)x1.2(W)x1.1(H)mm		• Reverse mount RGB. • Space-efficient design. • Wide viewing angle of 120°.	• RGB keyboard backlight. • Peripherals.
SMD Mini Chip Full Color	LTST-FC10	1.0(L)x1.0(W)x0.18(H) mm		• Top View 0404 RGB LED. • The ultra-thin of full-color type. • High brightness.	• Keypad/keyboard backlighting. • Full color micro display.
SMD Mini Chip Full Color	LTST-FS63H	1.8(L)x0.64(W)x0.3(H)mm		• World's smallest side view Tri-Color LED. • Full-color type LED. • High brightness.	• Mobile keypad backlight. • Keyboard backlight. • Ultra-thin space backlight.
SMD Chip LED	LTST-C232 / LTW-C232	2.2(L)x1.2(W)x0.3(H)mm		• The ultra-thin reverse mount single color LED. • High brightness. • Available in a variety of colors.	• Keyboard or keypad backlight. • Display. • LED icon touch. • Reinforced glass panel.

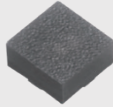
SMD PLCC Full color	E682 / N682 / N683 / G683	3.5(L)x2.8(W)x1.9(H)mm		• PLCC4/ PLCC6. • White diffused lens. • PLCC4 Black face option available. • Dual color option available. • Designed for electronic sign use. • Available in a variety of colors and luminance selection.	• Consumer electronics backlight. • Status indicator. • Decorative lighting. • Automotive lighting.
SMD PLCC Full color	N213 / E213	2.1(L)x2.1(W)x1.0(H)mm		• PLCC4. • White diffused lens. • White-face option available. • Designed for electronic signage use.	• Gaming backlighting. • Display. • Indicators lights for portable devices.
SMD PLCC	T680 / B680	3.5(L)x2.8(W)x1.9(H)mm		• PLCC2. • White diffused lens. • White face option available. • Designed for electronic sign use. • Available in all different colors upon request.	• Message signs. • Automotive lighting.
SMD Mini PLCC	T180	1.6(L)x0.8(W)x0.55(H)mm		• PLCC2. • Transparent lens. • White face option available. • Designed for high temperature use. • Available in all different colors upon request.	• Networking. • Automotive lighting. • Charger station.
SMD Mini PLCC	E142 / E143	1.55(L)x1.55(W)x0.55(H)mm		• PLCC4. • White diffused lens. • Designed for high temperature use. • Available in all different colors upon request.	• Full color display. • Networking. • Automotive lighting. • Charger station. • High-end home appliances.
SMD Mini PLCC	G163	1.65(L)x1.65(W)x0.55(H)mm		• PLCC6. • Transparent lens. • Designed for high temperature use. • Designed for gaming keyboard per-key with high brightness for power saving. • Available in all different colors upon request.	• Full color display. • Networking. • Automotive lighting. • Gaming keyboard. • High-end home appliances.
SMD Mini PLCC RGB IC	E183C	1.85(L)x1.85(W)x0.6(H)mm		• PLCC4. • White diffused lens. • IC built-in solution. • Free passive component. • Saving SMT & maintain cost. • Better consistency of color mixing. • Extreme small power consumption.	• Charger station. • High-end home appliances. • LED decorative lighting • Curtain display
SMD PLCC RGB IC	G353C	3.5(L)x3.5(W)x0.95(H)mm		• PLCC6. • White diffused lens. • IC built-in solution. • Free passive component. • Saving SMT & maintain cost. • Better consistency of color mixing. • Extreme small power consumption. • Supports breakpoint continuous transmission.	• Consumer electronics with LED illumination • LED decorative lighting • Curtain display
SMD Mini S/V PLCC	S04	2.0(L)x0.9(W)x0.43(H)mm		• PLCC2. • Transparent lens. • Designed for high temperature use. • Available in all different colors upon request.	• Networking. • Automotive lighting. • Gaming keyboard. • High-end home appliances.
SMD S/V PLCC	006	4.5(L)x1.0(W)x0.64(H)mm		• PLCC6. • White diffused lens. • Designed for high temperature use. • Brightest side view product. • Available in all different colors upon request.	• Networking. • Automotive lighting. • Keyboard backlight.
SMD S/V PLCC RGBW	S06W	4.5(L)x1.0(W)x0.64(H)mm		• PLCC6 4-in-1 four color solution. • White diffused lens. • Brightest side view product. • Available in all different colors upon request. • Four color to solve RGB-white color uneven issue.	• Networking. • Automotive lighting. • High-end home appliances.
SMD Mini CSP	LTW-A031A/LTST-A031A	1.0(L)x1.0(W)x0.18(H) mm		• Ultimate 0201 thickness lead thinnest OD. • Wide viewing angle 154°/137°. • 3 times brighter than conventional chip LED. • Saving half power consumption in system. • Maximum driving current 20mA. • White, Red, Green, Blue are available.	• Mobile keypad backlight. • Keyboard backlight. • Indicator
SMD Power Flash	LTPL-C0675 / LTPL-C0677	2.0(L)x1.6(W)x0.7(H)mm		• High flux density with compact light emitting source. • Rated 1.5 A max pulse current. • Typical luminous flux: 240lm@ 1A. (LTPL-C0675) 260lm@1A. CRI80 (LTPL-C0677), 240lm@1A CRI 90 (LTPL-C0677)	• Camera phone. • Handheld device. • Barcode light source
SMD Power Flash	LTPL-C0613	2.0(L)x1.6(W)x0.53(H)mm		• High brightness in PCT type for high power application. • Ultra-thin 2016 solution. Rated 500mA max pulse current. • Typical luminous flux: 105lm@ 500A.	

SMD Mini CSP	LTST-A07RGB	0.7(L)x0.4(W)x0.15(H)mm	SMD Power Flash	LTPL-A138D	1.4(L)x1.4(W)x0.25(H)mm
	• Ultimate thickness RGB LED lead thinnest OD • 3 times brighter than conventional chip LED • Saving half power consumption in system • Maximum driving current 30mA	• Mobile keypad backlight. • Keyboard backlight. • Indicator lights.		• Smaller size with compact light emitting source, • Ultimate thin package is suitable for front and back flash application • Rated 1.5 A max pulse current. • High CRI: 80, 90 for all CCT. • Typical luminous flux: CRI80: 245lm @ 1A; CRI90: 210lm @ 1A.	• Camera phone. • Handheld device. • Barcode light source

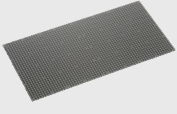
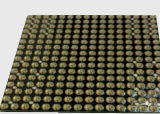
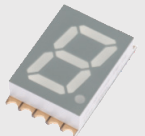
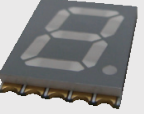
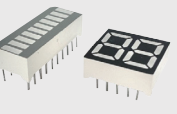
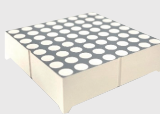
Automotive LED

SMD Chip LED	LTSA-C191	1.6(L)x0.8(W)x0.55(H)mm	SMD PLCC LED	LTSA-E607	1.6(L)x0.75(W)x0.55(H)mm
	• Top View ChipLED. • Bass on AEC-Q101D. • Ultra-compact makes a high degree of expressiveness for use in high resolution, high density matrix applications. • Wide viewing angle 120°. • Available in a variety of colors.	• Automotive indicator.		• Top View PLCC LED. • Clear lens. • Based on AEC-Q101D. • Designed for automotive application. • Available in a variety of color. • View angle 120°. • Operation Temp 110° C. • MSL 2a.	• Automotive interior solution. • Switch, Dashboard
Mini Top LED	LTSA-M67	2.3(L)x1.4(W)x1.3(H)mm	SMD PLCC 2	LTSA-T680	3.5(L)x2.8(W)x1.9(H)mm
	• MiniTOP LED. • White diffused lens. • Based on AEC-Q101D. • Designed for automotive application. • Available in a variety of color. • View angle 120°. • Operation Temp 110° C. • MSL 2a.	• Automotive interior solution. • Switch, Dashboard, Sign Mark solution.		• PLCC2. • White diffused lens. • Based on AEC-Q101D. • Designed for automotive application. • Available in a variety of color. • View angle 120°. • Operation Temp 100° C. • MSL 2a.	• Automotive interior solution. • Automotive sign mark solution.
SMD PLCC 4	LTSA-E67R	3.5(L)x2.8(W)x1.9(H)mm	SMD PLCC 6	LTSA-G6S	3.4(L)x3.3(W)x1.9(H)mm
	• PLCC4. • White diffused lens. • Based on AEC-Q101D. • Designed for automotive application. • Available in a variety of color. • View angle 120°. • Operation Temp 100° C. • MSL 2a.	• Automotive CHMSL. • Automotive RCL.		• PLCC6. • Clear lens. • Based on AEC-Q101D. • Designed for automotive application. • Available in a variety of color. • View angle 120°. • Operation Temp 110° C. • MSL 2. • Junction Temp 125° C max.	• Automotive Turning Light. • Automotive RCL.
PLCC RGB	LTSA-G38T	3.4(L)x3.3(W)x1.90(H)mm	PLCC RGB	LTSA-S008	4.5(L)x1.25(W)x0.9(H)mm
	• TOP PLCC RGB. • White diffused lens. • Based on AEC-Q101D. • Designed for automotive application. • Available in full color. • View angle 120°. • Operation Temp 110° C. • MSL 2a. • Junction Temp 125° C max.	• Automotive interior solution. • Switch, Dashboard, Sign Mark solution.		• Side view PLCC RGB. • White diffused lens. • Based on AEC-Q101D. • Designed for automotive application. • Available in full color. • View angle 120°. • Operation Temp 100° C. • MSL 2a. • Junction Temp 125° C max.	• Automotive interior solution. • Switch, Dashboard, Sign Mark solution.
Chip RGB	LTSA-S33H	3.0(L)x1.0(W)x0.5(H)mm	Power LED	LTPA-P35	3.7(L)x3.5(W)x0.8(H)mm
	• Side view Chip RGB. • Clear lens. • Based on AEC-Q101D. • Designed for automotive application. • Available in full color. • View angle 120°. • Operation Temp 100° C. • MSL 2a.	• Ambient light		• PLCC 1W. • Anti-Sulfur Design. • High lm/\$. • 80lm@350mA. (PC Amber) • 105lm@350mA. (CCT 5600K) • Available in full color. • View angle 120°. • Junction Temp 115° C max.	• Automotive aftermarket eg: TI Reading light. • Automotive Working Lamp.
Power 2835	LTPA-2835	3.5(L)x2.8(W)x0.8(H)mm	Power LED	LTPA-C35	3.45(L)x3.45(W)x2.13(H)mm
	• PLCC 0.5W. • Based on AEC-Q101D. • 24lm@60mA. (CCT 6500K) • 62lm@150mA. (CCT 6500K) • View angle 120° Operation Temp 105° C. • MSL 2a. • Junction Temp 125° C max.			• Chip on Ceramic 3535. • LED with optical lens. • 135lm@350mA. • 235lm@700mA. (white color) • Automotive aftermarket eg: DRL, Reading light. • View angle 118°. • Operation Temp 125° C. • MSL 2. • Junction Temp 145° C max.	• Automotive DRL. • Automotive Working Lamp.

Power LED	LTPA-S38	3.8(L)x3.8(W)x0.7(H)mm	 - Vertical chip on EMC 3838. - Low Voids Solution. 55lm@ 350mA. (Red) - Slim Design - Black Package for High Stability - View angle 120° - Operation Temp 125° C - MSL 2. - Junction Temp 150° C max. - Automotive RCL, CHMSL.
HEAD LAMP(3 chip)	LTPA-H3S	4.2(L)x3.75(W)x0.82(H)mm	 - Slim Design. - High Brightness. - Based on AEC-Q102. 1080lm@1000mA. (CCT 5600K) 10.25v @1000mA. - View Angle 120° - Low Thermal Resistant. - Low Voids Solution. - Operation Temp 125° C. - MSL 2. - Junction Temp 150° C max. - Automotive Headlamp, High/Low Beam solutions.
Power LED	LTPA-2720	2.75(L)x2.0(W)x0.6(H) mm	 - Slim Design. - High Brightness. - Power 0.5~2.5W. - Based on AEC-Q102. 80lm@200mA. (CCT 5600K) 35lm@150mA. (PC Amber) 40lm@200mA. (Red) 120lm@350mA. (CCT 5600K) 80lm@300mA. (PC Amber) 82lm@350mA. (Red) 230lm@700mA. (CCT 5600K) 122lm@600mA. (PC Amber) 100lm@700mA. (Red) - View Angle 120° - Low Thermal Resistant. - Low Voids Solution. - Operation Temp 125° C. - MSL 2. - Junction Temp 150° C max. - Automotive RCL, CHMSL, DRL, TI.
HEAD LAMP(1chip)	LTPA-H1N	1.88(L)x1.61(W)x0.76(H) mm	 - Slim design. - High brightness. - Based 345lm on AEC-Q102. 345lm@1000mA. (CCT 5600K) 3.25v @1000mA. - View Angle 120° - Low thermal resistant. - Low voids solution. - Operation temp 125° C. - MSL 2. - Junction temp 150° C max. - Automotive Headlamp, High/Low Beam solutions.
HEAD LAMP(2 chip)	LTPA-H2L	2.75(L)x2.0(W)x0.8(H) mm	 - Slim design. - High brightness. - Based 80lm on AEC-Q102. 80lm@200mA. (CCT 5600K) 48lm@200mA. (PC Amber) 3.1v @200mA. (Single light) - View angle 120° - Low thermal resistant. - Low voids solution. - Operation temp 125° C. - MSL 2. - Junction temp 150° C max. - Automotive DRL, TI.
PLCC RGB	LTSA-3030EGBWU	3.0(L)x3.0(W)x0.7(H) mm	 - MiniTOP CSP LED - Base on AEC-Q102 - View angle 120° - MSL 2 - High brightness - R/G/B independent current circuit design. - Automotive interior ambient lighting
HEAD LAMP(2 chip)	LTPA-AM102P-1	20.5(L)x6.0(W)x0.62(H) mm	 - Slim Design. - High Brightness. - Based on AEC-Q102. - View Angle 120° - Low Thermal Resistant. - Low Voids Solution. - Operation Temp 125° C. - MSL 2. - Junction Temp 150° C max. - Automotive ADB
RGB+IC	LTSA-E35B	3.5(L)x3.5(W)x1.06(H)mm	 - Ultra Bright InGaN / AlInGaP LED Chips - Thin (1.35 mm) Chip LED and EIA STD Package - Preconditioning: Accelerate to JEDEC Level 2 - Serial communication with ISELED compliance. - Bi directional, half-duplex, 2Mbit/s, serial communication 8 bit brightness resolution for red, green, and blue LED - Temperature compensation on red for constant brightness. - Maximum of 4079 LED's in one chain. - Qualification is based on AEC-Q102.Slim design. - Automotive interior ambient lighting
RGB+IC	LTSA-E27I	2.7(L)x2.7(W)x0.65(H) mm	 - Ultra Bright InGaN / AlInGaP LED Chips - Thin (0.65 mm) Chip LED and EIA STD Package - Preconditioning: Accelerate to JEDEC Level 2a - Compatible with Automatic Placement Equipment - Compatible with Infrared Reflow Solder Process 8 Bits 3 Channels I.C. Embedded - Global brightness 6 Bits control - Data/Clock Frequency is 15MHz - Qualification is based on AEC-Q102 - Automotive interior ambient lighting
Mini LED	LTSA-0603	0.6(L)x0.3(W)x0.15(H)mm	 - MiniTOP CSP LED - Base on AEC-Q102 - View angle 120° - MSL 2 800mcd@10mA for White (CCx CCy 0.31, 0.31) 800mcd @ 20mA for Red (Wp 625nm) - Automotive Exterior solution

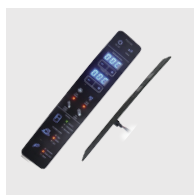
Mini LED	LTSA-1010R4U	1.0(L)x1.0(W)x0.5(H) mm	Mini LED	LTSA-1010R4U	1.0(L)x1.0(W)x0.5(H) mm
	• Mini TOP 4red chip in one LED • Base on AEC-Q102 • View angle 120° • MSL 2 • Common anode 5 pad design • 200mcd @ 7mA for each chip • High resolution solution by 1.2mm pitch	• Automotive Rear lighting		• Mini TOP CSP LED • Base on AEC-Q102 • View angle 120° • MSL 2 • Common Anode 5 pad design • 200mcd @ 7mA for each chip • High resolution solution by 1.2mm pitch	• Automotive Rear lighting

LED Display

SMD Module	LTM-0124M-01	80x40mm	RGB Module	LTM-1602SF	256x128mm
	• Low power requirement. • Solid State reliability. • 16 x 32 array with X-Y select. • Multicolor displays are applicable to three bright colors. • 1/16 duty Dynamic scan method. • Control method: shift register type. • Text with PWM driven ICs. • Stackable horizontally. • Categorized for Luminous intensity.	• Message sign. • Networking.		• Low power requirement. • Solid state reliability. • 32x64 array with X-Y select. • Multicolor displays are applicable to three bright colors. • 1/8 duty dynamic scan method. • Control method: shift register type. • Text with PWM driven ICs. • Stackable horizontally. • Categorized for Luminous intensity.	• Message sign. • Networking.
Dome Matrix	LTP-158FFKF / LTP-7588SF (RGB)	40.64x40.64x2.8mm 20x20x6mm	SMD Display	LTS-4812CKR-PM	15x9.8x3.75mm
	• 16x16 matrix, Ø 2. • 8x8 matrix, Ø 2. • 1/16 duty dynamic scan method. • Wide viewing angle. • Low power requirement. • Excellent characters appearance. • High brightness & high contrast • Solid state reliability. • Stackable vertically and horizontally.	• Message sign. • Networking.		• 0.39 inch (10.0 mm) digit height. • Continuous uniform segments. • Low power requirement. • Excellent characters appearance. • High brightness & high contrast. • Wide viewing angle. • Solid state reliability. • Categorized for luminous intensity. • Reflow able SMD display. • Lead free package. (according to RoHS)	• Instrument. • Industry. • Home appliance.
Reverse SMD Display	LTS-4817CKR-P / LTS-4812CKR-P	16x9.8x2.1 mm 16x9.8x1.6 mm	Through Hole Display	LTA-1000xx/ LTD-4424xx	25.3x 10.16x8 mm 16x15x7 mm
	• 0.39 inch (10.0 mm) DIGIT HEIGHT. • Continuous uniform segments. • Low power requirement. • Excellent characters appearance. • High brightness & high contrast. • Wide viewing angle. • Solid state reliability. • Categorized for luminous intensity. • Reflow able SMD display. • Lead free package. (according to RoHS)	• Instrument \ Industry.		• Large, bright, uniform light emitting. • Low power requirements. • High brightness and high contrast. • Categorized for luminous intensity.	• Pachinko. • Meter. • Indicator.
Dot Matrix	LTP-14188xx	38x38x10 mm	Backlight Module	LTB-Dxxx	50x30x1.5 mm
	• 1.4inch matrix height. • Single plane, wide viewing angle. • Low power requirement. • 8x8 array with X-Y select. • Stackable horizontally. • Solid state reliability.	• Signboard. • Transportation.		• Excellent uniformity. • Solid state reliability. • Green product. • Low profile thickness. • High brightness & high contrast. • Customized product. • Esthetic lighting performance.	• Backlight module. • Gaming. • Medical.

Sensor Touch Display
LTM-xxxx

264x50x3mm
189x60x2.5mm



- Alternative to mechanical buttons and sliders.
- Display value added and make circuit at system side simpler.
- Works with a variety of overlay materials and thicknesses.
- Total thickness can be reduced to less than 3 mm.
- Sensor sensitivity can still be kept even with cover plane.
- No bending issue even with big size due to free from epoxy material.
- Home appl \ Elevator.

Through Hole Lamp
Single Level SMT CBI

**LTL-M11KS1H310Q / LTL-M11TB1H310Q
LTL-M11TG1H310Q / LTL-M12YB1H310U
LTL-M12YB1H310U**

4.32x 5.03x 6.10mm

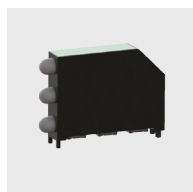
- Circuit board indicator.
- Surface mounting.
- Good reliability.
- IR reflow.
- Single color.
Yellow/ Red / Blue / Pure Green
- Dual color.
Yellow & yellow green
red & yellow green
- Networking.
- Home appliance.

Bi-Level SMT CBI

**LTL-M24YG0HM20U
LTL-M24M1HM20U**

4.24x 11.56x 14.22mm

- Circuit board indicator.
- Surface mounting.
- Good reliability.
- IR reflow.
- Single color.
Yellow/ Red / Blue / Pure Green
- Dual color.
Yellow & yellow green
red & yellow green
- Networking.
- Home appliance.

Tri-Level SMT CBI

LTL-M36YG0HM30U

4.24x 16.08x 19.94mm

- Circuit board indicator.
- Surface mounting.
- Good reliability.
- IR reflow.
- Single color.
Yellow/ Red / Blue / Pure Green
- Dual color.
Yellow & yellow green
red & yellow green
- Networking.
- Home appliance.

Quad Level CBI

LTL-42M7NH51

10.7x 4.5x 23.4mm

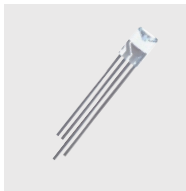
- Circuit board indicator.
- Lateral light.
- Good reliability.
- Ceramic based single color.
- Dual color.
- Networking.
- Home appliance.

SMT Lamp

**LTL-MR4EVX3DA / LTL-MR4YVX3DA
LTL-MR4TBTV3DA / LTL-MR4TCXZ3DA
LTL-MR4TGY13DA / LTL-MR4DZ3KA
LTL-MR4DX3KY**

4.2 x 4.2 x 6.9mm

- SMT lamp.
- High brightness.
- Good reliability.
- Good uniformity.
- View angle
Round 20&30 deg.
Oval 100/40 deg
- Yellow: 5500~12000mcd
Red: 5500~12000mcd
Blue: 3200~7200mcd
Green: 12000~27000mcd
Cyan: 9300~21000mcd
White: 8500~21000mcd
PC Amber: 5500~12000mcd
- Outdoor message sign.
- Bus sign.
- Smoke detector

**RGB+IC Lamp
RGBW+ IC Lamp**

**LTL-M488RGBFK
LTL-M488RGBFK**

- High luminous intensity.
- 8-bit driver IC
- Constant current PWM control.
- Superior resistance to moisture.
Red: 2700~3850mcd
Blue: 1100~2200mcd
Green: 5550~9550mcd
White: 8500~21000mcd
- Full-color module.
- LED Decorative lighting.
- Home appliances.

3mm Oval Lamp

**LTL-M3H3ERADS / LTL-M3H3TGUADS
LTL-M3H3TBPADS**

- 3 mm oval lamp.
- High brightness.
- Good reliability.
- Wilder view angle 100/ 45 deg.
- Red / blue/ green color.
Red: 2500mcd.
Green: 3800mcd.
Blue: 880mcd.
- Outdoor message sign.
- RGB video signboard.

4mm Oval Lamp

LTL-M4HMYNADS / LTL-M4VMEPADS

- 4 mm oval lamp.
- High brightness.
- Good reliability.
- Various kinds of intensity level solutions.
- Wilder view angle 120/60 deg.
- Red/yellow color.
Red: 1000mcd.
Yellow: 1000mcd.
- Outdoor message sign.
- Bus sign.

5mm Round Lamp



**LTL2R3EW3KS / LTL2R3YW3KS
LTL2R3TGY3KS / LTL2R3TBV3KS**

- 5 mm round lamp.
- High brightness.
- Good reliability.
- Excellent light pattern for VMS.
- View angle 15/23/30 deg.
- Red: 3600~16000mcd.
- Yellow: 3800~16000mcd.
- Pure Green: 7800~27000mcd.
- Blue: 2600~8300mcd.
- Traffic sign.
- Outdoor message sign.

White Lamp



LTW-17KDU3Z / LTW-488DHEW2D

- 3 mm round lamp.
- 4 mm round/oval lamp.
- 5 mm round/oval lamp.
- 5 mm cylindrical lamp
- High brightness.
- Good reliability.
- Good uniformity.
- View angle 15/25/45/60 deg.
- Bluish white normal white.
- Home appliance.
- Traffic sign.

RGB 4pin



**LTL750RGBHBJ / LTL760RGBEBJ /
LTL762RGBTAJW**

- 5 mm 4pin RGB lamp.
- High brightness.
- Good reliability.
- LTL750RGBHBJ, 4 pin pitch 1.27mm.
- LTL760RGBEBJ, 4 pin pitch 2.54mm.
- LTL762RGBTAJW, 4 pin pitch 2.54mm.
- Networking.
- Keyboard/Mouse.

Optical Sensor / Digital Ambient Light Sensors

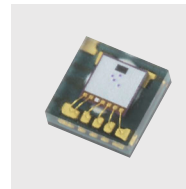
Color Sensor



LTR-381RGB 2.0x2.0x0.7mm
LTR-383RGB* 2.0x1.0x0.5mm
LTR-D383RGB* (High CCT accuracy) 2.4x2.0x0.7mm

- Miniature Package.
- I2C Interface.
- Low Power Consumption.
- Color temperature (Red, Green & Blue) respective lux readings.
- Wide Dynamic Range including low lux capability
- Mobile, Laptop, Tablet, Industrial, Wearable devices, IoT.

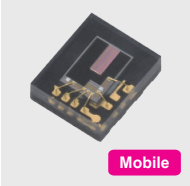
UV Sensor



LTR-390UV 2.0x2.0x0.7mm

- Miniature Package.
- I2C Interface.
- Low Power Consumption.
- Ultraviolet light (UVS) sensing
- Very low power consumption with sleep mode capability
- Wearable devices, IoT.

Digital Ambient Light Sensors



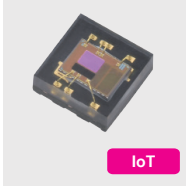
Mobile

Mobile
LTR-311ALS (High sensitivity ALS)
LTR-312ALS* (Ultra sensitive ALS)
LTR-311ALS: 2.4x2.0x0.7mm
LTR-312ALS*: 2.0x1.0x0.5mm

IoT
LTR-F216A (Good IR rejection ALS)
LTR-F216A: 2.0x2.0x0.7mm

- Miniature package.
- I2C interface.
- Low power consumption.
- Close to human eye spectral response.
- Wide dynamic range including low lux capability.
- Smart home, Wearable devices, IoT, Laptop, Tablet, IP camera, Smart doorbell.

Digital Ambient Light Sensors



IoT

IoT
LTR-X221A (Best IR rejection ALS)
LTR-X210A* (Ultra sensitive, ultra compact)
LTR-X221A: 2.0x2.0x0.7mm
LTR-X210A*: 2.0x1.0x0.35mm

Laptop
LTR-X100A (Intel ISH) LTR-X100A: 2.0x2.0x0.7mm

General
LTR-303ALS LTR-303ALS: 2.0x2.0x0.7mm
LTR-329ALS LTR-329ALS: 2.0x2.0x0.7mm
LTR-X119A LTR-X119A: 2.0x2.0x0.7mm
LTR-X130A LTR-X130A: 3.94x2.36x1.35mm
LTR-X140A LTR-X140A: 2.84x1.44x0.7mm

- Miniature package.
- I2C interface.
- Low power consumption.
- Close to human eye spectral response.
- Wide dynamic range including low lux capability.
- Smart home, Wearable devices, IoT, Laptop, Tablet.

Laptop General

Optical Sensor / Digital Proximity

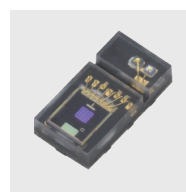
Small window Opening Proximity Sensor



LTR-X130P (Small Window) 3.94x2.36x1.35mm

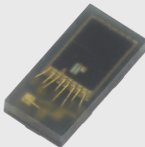
- Miniature Package.
- I2C Interface.
- Low Power Consumption.
- Built-in LED driver and detector
- High ambient light suppression
- Cancellation of crosstalk
- Programmable LED driver settings
- IoT, Wearable devices, Industrial

Narrow Package Proximity Sensor



LTR-X140P (VCSEL, Narrow package) 2.84x1.44x0.7mm

- Miniature Package.
- I2C Interface.
- Low Power Consumption.
- Built-in LED driver and detector
- High ambient light suppression
- Cancellation of crosstalk
- Programmable LED driver settings
- IoT, Wearable devices, Industrial

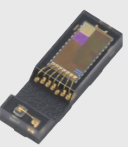
Long Distance Proximity Sensor	LTR-X150P (Long distance) 4.0x1.5x1.0mm	• Miniature Package. • I2C Interface. • Low Power Consumption. • Built-in LED driver and detector • High ambient light suppression • Cancellation of crosstalk • Programmable LED driver settings	• IoT, Laptop, Tablet, Industrial, Wearable devices.
			
Ultra Small TWS Proximity Sensor	LTR-2010PS (Ultra small, low power, TWS application) 2.0x1.0x0.35mm	• Ultra Compact Package. • I2C Interface. • Ultra low Power Consumption. • Built-in LED driver and detector • High ambient light suppression • Cancellation of crosstalk • Programmable LED driver settings	• TWS, Wearable devices.
			

Gesture + Proximity Sensor	LTR-X910G 4.0x1.5x1.0mm	• Miniature Package. • I2C Interface. • Low Power Consumption. • Gesture and proximity sensing. • Contactless 4-directional motion detection: Left, right. Far, near. • Flexible detection distance	• IoT, Laptop, Tablet, Industrial, Wearable devices.
			

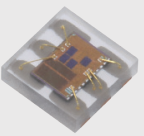
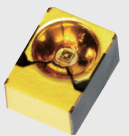
Optical Sensor / Integrated sensors

Small window Opening 3-in-1	LTR-568ALS* LTR-578ALS (Small Window) 3.94x2.36x1.35mm 3.94x2.36x1.35mm	• Miniature Package. • I2C Interface. • Low Power Consumption. • Close to Human Eye Spectral Response. • Wide Dynamic Range including low lux capability. • Built-in LED driver and detector • High ambient light suppression • Cancellation of crosstalk • Programmable LED driver settings	• Mobile, Tablet.
			
Shield-less 3-in-1	LTR-2568ALS (VCSEL, Shield-less) 2.84x1.44x0.7mm	• Miniature Package. • I2C Interface. • Low Power Consumption. • Close to Human Eye Spectral Response. • Wide Dynamic Range including low lux capability. • Built-in LED driver and detector • High ambient light suppression • Cancellation of crosstalk • Programmable LED driver settings	• Mobile, Tablet.
			

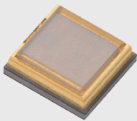
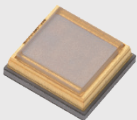
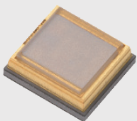
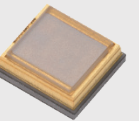
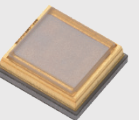
Thin Window Opening 3-in-1	LTR-569ALS (Thin window opening) 4.0x1.5x1.0mm	• Miniature package. • I2C interface. • Low power consumption. • Close to human eye spectral response. • Wide dynamic range including low lux capability. • Built-in LED driver and detector • High ambient light suppression • Cancellation of crosstalk • Programmable LED driver settings	• Mobile, Tablet.
			
Slit Window Opening 3-in-1	LTR-570ALS* (Slit window opening) 4.2x1.5x1.0mm LTR-570RGB* (Slit window opening RGB version) 4.2x1.5x1.0mm	• Miniature package. • I2C interface. • Low power consumption. • Close to human eye spectral response. • Wide dynamic range including low lux capability. • Built-in LED driver and detector • High ambient light suppression • Cancellation of crosstalk • Programmable LED driver settings	• Mobile, Tablet.
			

Narrow Package 3-in-1	LTR-2532ALS (Narrow package) 3.25x1.1x0.6mm	• Miniature package. • I2C interface. • Low power consumption. • Close to human eye spectral response. • Wide dynamic range including low lux capability. • Built-in LED driver and detector • High ambient light suppression • Cancellation of crosstalk • Programmable LED driver settings	• Mobile, Tablet.
			

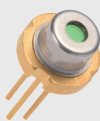
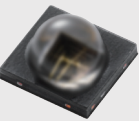
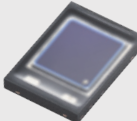
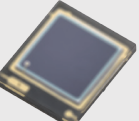
Optical Sensor / Automotive Sensors & Others

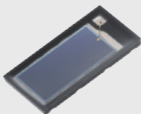
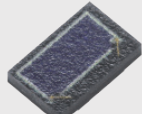
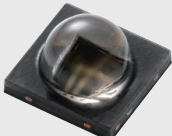
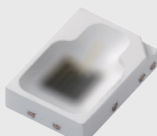
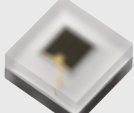
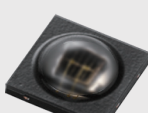
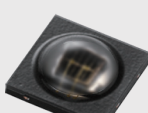
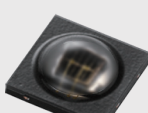
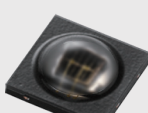
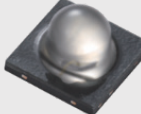
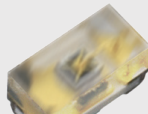
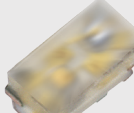
Automotive Grade Ambient Light Sensor	LTRA-X222A* (Automotive grade AECQ) 2.0x2.0x0.5mm	• I2C interface. • Low power consumption. • High accuracy in low ambient brightness environment. • High sensitivity • Wide dynamic range. • High gain setting up to 1024 times. • Close to human eye spectral response	• Automotive.
			
Bowl Infrared LED	855nm: LTE-C249 940nm: LTE-C269 2.3x1.95x0.9mm 2.3x1.95x0.9mm	• Miniature package. • (Low Profile height of 1.6mm & 0.9mm ht) • High output. (mW/Sr) • No lens required to achieve narrow viewing angle. • Eliminate cross talk. • Peak wavelength. (855nm & 940nm)	• Mobile, Laptop, Industrial, Tablet, Remote control, Home appliances.
			

VCSEL illuminator / TOF Emitter

TOF Emitter	60x45 : LTPE-35321AMJ 64x51 : LTPE-35321AAK 72x58 : LTPE-35321AOX 90x69 : LTPE-35321ASZ 110x90 : LTPE-35321AWS	3.5x3.2x1.46mm 3.5x3.2x1.46mm 3.5x3.2x1.46mm 3.5x3.2x1.46mm 3.5x3.2x1.46mm
	2.2W VCSEL Emitter for Time-of-flight(ToF) <0.8ns rising and falling time to support higher frequency 940nm VCSEL, narrow wavelength tolerance, lower noise 60x45, 64x51, 72x58, 90x69, 110x90 rectangle light pattern to fulfill different applications - Photodiode eye-safety detection	- Mobile: World-facing ToF - Non-Mobile : 3D Sensing, Human-machine interaction, 3D recognition
VCSEL Flood Illuminator	60x45 : LTPE-35321AMJ 64x51 : LTPE-35321AAK 72x58 : LTPE-35321AOX 90x69 : LTPE-35321ASZ 110x90 : LTPE-35321AWS	3.5x3.2x1.46mm 3.5x3.2x1.46mm 3.5x3.2x1.46mm 3.5x3.2x1.46mm 3.5x3.2x1.46mm
	2.2W rectangle light pattern VCSEL illuminator 60x45, 64x51, 72x58, 90x69, 110x90 rectangle light pattern to fulfill different applications - Photodiode eye-safety detection	- Mobile: front-facing flood illuminator - Non-Mobile : infrared illumination, surveillance, 2D infrared sensing.
Linear VCSEL Emitter	110x40 : LTE-35321AWJ	3.5x3.2x1.46mm
	2.2W VCSEL Emitter for Time-of-flight(ToF) 110x40 rectangle light pattern VCSEL illuminator - Linear light pattern, high efficiency for targeting area <0.8ns rising and falling time to support higher frequency - Photodiode eye-safety detection	Non-Mobile : sweep robot, robot, machine vision, Automated Guided Vehicle(AGV)
TOF Emitter	60x45 : LTPE-35321SMJ 72x58 : LTPE-35321SOX 110x90 : LTPE35321SWS	3.5x3.2x1.46mm 3.5x3.2x1.46mm 3.5x3.2x1.46mm
	4W VCSEL Emitter for Time-of-flight(ToF) <0.8ns rising and falling time to support higher frequency 940nm VCSEL, narrow wavelength tolerance, lower noise 60x45, 72x58, 110x90 rectangle light pattern to fulfill different applications - Photodiode eye-safety detection	- Mobile: World-facing ToF - Non-Mobile : 3D Sensing, Human-machine interaction, 3D recognition
Narrow Angle VCSEL Emitter	25deg circular : LTPE-35321AFF	3.5x3.2x1.46mm
	2.3W 25deg circular light pattern VCSEL illuminator - Long distance illuminator	Non-Mobile : long distance infrared illumination, surveillance

Infrared Emitting & Receiver

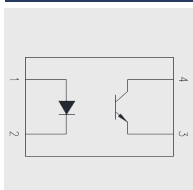
LiDAR DIP Series	^{905nm} LTE-L201E Series	10x25deg TO56
	- Driving Current: 40A - Peak Optical Power: 135W	- Wearable - Industrial application
Automotive	^{940nm} LTEA-R381AS Series	50deg: 3.8x3.8x3.0mm 90deg: 3.8x3.8x2.2mm
	- Max. Junction Temperature: 145oC - Thermal Resistance: typ. 3 K/W - Radiant Intensity: 700-1300 mW/sr - View Angle: 50~90deg	
SMD PD	LTR-C5040	5.09x4.0x0.85mm
	- Photo-diode receiver - Peak detection: - I_p=40uA @940nm - I_p=35uA @640nm - I_p=20uA @525nm (Oximetry & HRM)	- Wearable - Industrial application
SMD PD	LTR-C4437	4.4x3.7x0.55 mm
	- Photo-diode receiver - Peak detection: - I_p=40uA @940nm - I_p=25uA @525nm - I_p=35uA @640nm (Oximetry & HRM)	- Wearable - Industrial application

SMD PD	LTR-C4825	4.8x2.5x0.5 mm	 • Photo-diode receiver • Peak detection: • Ip=24uA(min.) @940nm • Ip=17uA(min.) @525nm • (Oximetry & HRM) • Wearable • Industrial application
SMD PD	LTR-C3220/LTR-C3221	3.2x2.0x0.6 mm	 • Photo-diode receiver • Peak detection of C3220: • Ip=16uA @940nm • Ip=14uA @660nm • Ip=11uA @525nm • Peak detection of C3221: • Ip=22uA @940nm • Ip=17uA @660nm • Ip=13uA @525nm • (Oximetry & HRM) • Wearable • Industrial application • Metaverse
High Power IR	850nm LTE-R38386 Series	50deg 3.8x3.8x3.0mm 90deg 3.8x3.8x2.2mm 120deg 3.8x3.8x2.2mm 150deg 3.8x3.8x1.5mm	 • High power SMD Infrared Emitter. (1.5~3.4W) • High radiant intensity with low power consumption. • High performance and quality. • 850nm/940nm are available • Various view angle. • CCTV. • IP cam. • Biometric recognition. • Automotive. • Gesture.
High Power IR	850nm LTE-R28206 Series	80deg 2.75x2.0x1.8mm 120deg 2.75x2.0x0.6mm	 • High power SMD Infrared Emitter. (1.2~3.4W) • High radiant intensity with low power consumption. • High performance and quality. • 850nm/940nm are available • Various view angle. • CCTV. • IP cam. • Biometric recognition. • Automotive. • Gesture.
High Power IR	850nm LTE-F16166T-ME8 (60D)	60deg 1.6x1.6x1.8 mm 120deg 1.6x1.6x0.81mm	 • High power SMD Infrared Emitter. (1.5~3.4W) • High radiant intensity with low power consumption. • High performance and quality. • 850nm/940nm are available • Various view angle. • CCTV. • IP cam. • Biometric recognition. • Automotive. • Gesture.
Middle power IR	850nm LTE-F16161S-YE8 (120D)	60deg 1.6x1.6x1.8 mm 120deg 1.6x1.6x0.81mm	 • High power SMD Infrared Emitter. (1.5~3.4W) • High radiant intensity with low power consumption. • High performance and quality. • 850nm/940nm are available • Various view angle. • CCTV. • IP cam. • Biometric recognition. • Automotive. • Gesture.
Middle power IR	850nm LTE-R38386M Series	20deg 3.8x3.8x3.0mm 28deg 3.8x3.8x2.75mm 50deg 3.8x3.8x2.45mm 75deg 3.8x3.8x2.3mm 85deg 3.8x3.8x2.2mm 150deg 3.8x3.8x1.51mm	 • High power SMD Infrared Emitter. (1.5~3.4W) • High radiant intensity with low power consumption. • High performance and quality. • 850nm/940nm are available • Various view angle. • CCTV. • IP cam. • Biometric recognition. • Automotive. • Gesture.
Middle power IR	850nm LTE-T38386-KGX3 LTE-R38386M-CS3	20deg 3.8x3.8x3.0mm 28deg 3.8x3.8x2.75mm 50deg 3.8x3.8x2.45mm 75deg 3.8x3.8x2.3mm 85deg 3.8x3.8x2.2mm 150deg 3.8x3.8x1.51mm	 • High power SMD Infrared Emitter. (1.5~3.4W) • High radiant intensity with low power consumption. • High performance and quality. • 850nm/940nm are available • Various view angle. • CCTV. • IP cam. • Biometric recognition. • Automotive. • Gesture.
Middle power IR	850nm LTE-R38381M Series	20deg 3.8x3.8x3.0mm 28deg 3.8x3.8x2.75mm 50deg 3.8x3.8x2.45mm 75deg 3.8x3.8x2.3mm 85deg 3.8x3.8x2.2mm 150deg 3.8x3.8x1.51mm	 • High power SMD Infrared Emitter. (1.5~3.4W) • High radiant intensity with low power consumption. • High performance and quality. • 850nm/940nm are available • Various view angle. • CCTV. • IP cam. • Biometric recognition. • Automotive. • Gesture.
Middle power IR	850nm LTE-R30306-KG2 LTE-R30306-MG2	KG2: 3.0x3.0x2.22 mm MG2: 3.0x3.0x1.90 mm	 • Middle power SMD Infrared Emitter. (1.2W) • Total power 300mW • 850nm/940nm are available • Various view angle. • Non-symmetric special light pattern design • CCTV. • IP cam. • Biometric recognition. • Gesture.
SMD Emitter	LTE-C2826/LTE-C2821	1.0x0.5x0.45mm	 • Wavelength: 850nm / 940nm • 70mA Max • View Angle 150D • Compact size top view emitter • CCTV. • IP cam. • Industrial application • Metaverse
SMD VCSEL Emitter	LTE-C2821VS	1.0x0.5x0.45mm	 • Wavelength: 940nm • 20mA Max. • Driving current: 15mA • View Angle: 22D • Compact size top view emitter • Proximity sensor • Aiming application
SMD Emitter	LTE-C1951RG	2.5x1.6x0.55mm	 • Wavelength: 525 / 940 / 660nm • View Angle: 130D • Radiant intensity =2.5mW/sr @525nm@20mA • Radiant intensity =2.0mW/sr @940nm@20mA • Radiant intensity =3.0mW/sr @660nm @20mA • Wearable • Industrial application

Advanced SMD Emitter	LTE-C1816IRG 1.85x1.65x0.6mm	- Wavelength: 525 / 940 / 660nm - View Angle: 120D - Radiant flux =10mW @525nm@20mA - Radiant flux =9.0mW @940nm@20mA - Radiant flux =9.5mW @660nm @20mA	- Wearable - Industrial Application
Advanced SMD Emitter	LTE-C20081R-Y 2.0x0.8x0.6mm	- Wavelength: 660/ 940nm - View Angle: 120D - Radiant intensity =3.3mW/sr @660nm@20mA - Radiant intensity =3.0mW/sr @940nm@20mA	- Wearable - Industrial Application
PLCC IR/PTR	LTE-E6806/LTE-E6801/ LTR-E680 3.5*2.8x1.9mm	- Wavelength: 850/940nm - Top view. 100mA Max. - View Angle: 120D	- Remote control - Industrial Application - Automotive
PLCC IR/PTR	LTE-S0386/LTE-S0381/ LTR-S038 4.0x4.0x3.6mm	- Wavelength: 940nm - Side view 100mA Max. - View Angle: 120D	- Remote control - Industrial Application - Automotive
SMD IR/PTR	LTE-C1911 / LTE-C1916 / LTR-C191 / LTE-C1711 / LTE-C1716 / LTR-C171 / LTE-S2721 / LTE-C2726 / LTR-S272 / LTE-C9301 / LTE-C9306 / LTR-C9303 / LTE-C216 / LTE-C226 / LTE-C211 / LTE-S9511TS / LTE-S3201 / LTE-S3206 / LTR-S320 / LTE-S9511 / LTR-S951 / LTE-S9711 / LTR-S971 / LTE-C9501 / LTE-C9506B / LTR-C950 / LTE-C9901 / LTE-C9904 / LTE-C9906 / LTE-C9908 / LTE-C1551 / LTE-C1553 / LTR-C155 Various SMD package also available		
		- SMD type Infrared Emitter, Photo Transistor, and Photodiode. - Compatible with infrared and vapor phase reflow solder process. - Meet ROHS, Green Product.	- Proximity sensor - Remote controller - Touch screen - Reflective sensor control - CCTV - IP cam - Medical - Metaverse - Automotive
Infrared IR/PTR	5mm IR/Blue LTE-3271B / LTE-3271BL / LTE-3371T / LTE-5228A / LTE-4207 / LTE-4208 / LTE-4209 / LTE-4238R / LTE-4834RB / LTE-3677 / LTE-3376 / LTE-2872U / LTE-3370L / LTE-3226 / LTE-3220L / LTE-32B0L / LTE-3276 / LTE-32F0L / LTE-7F70L / LTE-7072 3mm IR/Blue LTE-1650 / LTE-4206 / LTE-209 / LTE-4209 / LTE-18G3N / LTE-16K3L / LTE-14H / LTE-16H / LTE-18H / LTE-10ABC / LTE-2053 Side look IR LTE-302 / LTE-309 / LTE-306 / LTE-7737L 5mm PTR LTR-323DB / LTR-4833 / LTR-7019D / LTR-3208 3mmPTR LTR-1650D / LTR-4206 / LTR-209 / LTR-20GP Side look PTR LTR-301 / LTR-306 / LTR-309 / LTR-5579DP1 / LTR-5986H / LTR-5888DH / LTR-5576D / LTR-516AB / LTR-516AD / LTR-526AD / LTR-536AD / LTR-546AB / LTR-546AD / LTR-733DBM1-TA Various Thru Hole device also available		
		- LTE-2872U, LTE-4208, LTE-10ABC, LTE-2053, LTE-4834RB are UL approved for smoke detector. - LTE-2872U matches with LTR-536AD & LTE-4208 matches with LTR-323DB. - LTE-10ABC, LTE-2053 matches with LTR-20GC & LTE-4834RB matches with LTR-4833. - There are various view angle from 30° to 50° for Remote controller. - There are high speed with various view angle from 15° to 60° for Securing Camera. - LTE-4206&LTR-588X are paired for mouse application - Selected to specific on-line intensity and radiation intensity ranges.	- Fire detector. - CCTV. - Remote controller. - Mouse. - Touch screen. - IP cam. - Medical.

Photocoupler

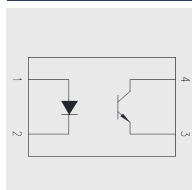
High performance Transistor



LTV-8D1 (DIP4)
LTV-3D1 (SOP4)
LTV-2D1 (SSOP4)
LTV-1Dxx (LSOP4)

- Flat CTR, no decay over IF and temp.
- High working temp 125°C.
- High Viso: 3,750-5,000Vrms.
- Bvceo 80V.
- Life doubled from general ones.
- A/C input available.
- For tough condition and long duration.
- 5G station power.
- power supply.
- feedback ciucuit.
- Home appliance.
- HVAC.

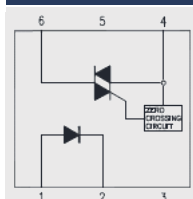
Automotive Photo Transistor



LTX-353 (SOP4)
LTX-213 (SSOP4)
LTX-1200 (LSOP4)

- World number 1 AECQ 102 certified.
- Flat CTR, no decay over IF and temp.
- High working temp 125°C.
- High Viso: 3,750-5,000Vrms.
- Bvceo 80V.
- Electric vehicle
- On board charger
- Battery management system for EV
- HVAC.
- EV charging station.

Photo Triac



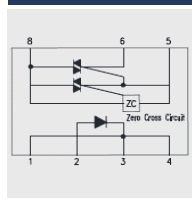
Zero-crossing
MOC306x (DIP6)
MOC308x (DIP6)
LTV-306x (SOP4)
LTV-308x (SOP4)

- High Viso: 3,750-5,000Vrms
- VDRM: 600V-800V
- Trigger current (IFT): 5-15mA in various product/package, 3mA low trigger available.
- 115°C working temperature.

Random phase
MOC302x (DIP6)
MOC305x (DIP6)
LTV-302x (SOP4)
LTV-305x (SOP4)

- AC Motor drivers
- Lighting controls.
- Solid state relays.
- Static Power Switches.
- Temperature controls.
- White goods, home appliance

Solid State Relay



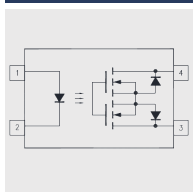
Zero-crossing
LTV-x213 (DIP8)

- IT(RMS) 0.3-1.2A
- High Viso=5,000Vrms.
- VDRM: 600V.
- Trigger current (IFT): < 10mA.
- No arcing

Random phase
LTV-x2x3 (DIP8)

- AC Motor drivers
- E.M. contactors.
- Solenoid / Valve controls.
- Heater
- White goods, home appliance

Photo Relay



1 form A
LTV-821x (DIP4)
LTV-721x (DIP6)
LTV-17xx (SOP4)

2 form A
LTV-822x (DIP8)

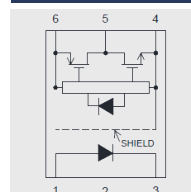
- Trigger LED current: <3 mA.
- High Viso: 3,750-5,000Vrms
- OFF-state output voltage 1800V/1500V / 600V / 400V / 60V.
- ON-state current 50mA / 300mA / 550mA / 1.6A / 2.0A.
- 1500V/1800V with AECQ 101 available.
- Operating temperature 110°C available.

1800V Automotive
LTX-7258 (DIP6-5pin)

1500V Automotive
LTX-258J (LSOP16-12pin)

- Battery Management System for EV
- High-speed circuit monitoring
- High power lighting.
- Smart Meters
- Mechanical relay replacements

IGBT Gate Driver

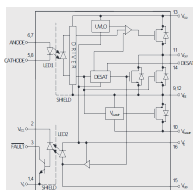


Rail to Rail Output
LTV-3120 (DIP8) / LTV-152/155E (SO5)
LTV-5341/5340/5314 (LSOP5)
LTV-6341/6340/6314 (LSOP6)
LTV-K342/H342 (LSOP8)
LTV-W3120/W3190 (400mil DIP8)

Non Rail to Rail Output
LTV-T350 (DIP8) / LTV-5314N (LSOP5)
LTV-6314N (LSOP6)
LTV-WT350 (400mil DIP8)

- 1-5A maximum peak output current.
- 200-500ns propagation delay.
- High Viso: 3,750-7,500Vrms
- Common mode transient immunity: ±20-35 kV/μs minimum,
- Vcc: 10-30V & 15-30V
- Working temperature -40°C to 125°C.
- 2mm thin-package available in LSOP5.
- Industrial Inverter.
- UPS.
- IGBT/MOSFET gate drive.
- Solar inverter
- Home appliance
- Digital power generator
- Servo engine/motor

Smart IGBT Gate Driver

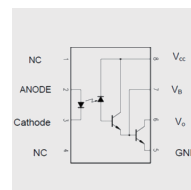


Auto Reset
LTV-330J/333J (LSOP16)

LED-triggered Reset
LTV-331J/332J (LSOP16)
LTV-316J (LSOP16)

- 2.5-5A maximum peak output current.
- 500ns propagation delay(316).
- 250ns propagation delay(33X).
- High Viso: 5,000Vrms.
- Common mode transient immunity: ±15 kV/μs minimum.
- Working temperature -40°C to 125°C.
- Industrial Inverter.
- Solar inverter
- Home appliance
- Digital power generator
- Servo engine/motor

High Speed (100KBd~1MBd)

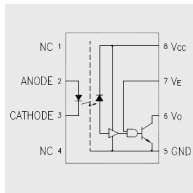


100KBd Darlington Output
6N139-L (DIP8)

1MBd Transistor Output
6N136-L (DIP8) / LTV-0501 (SOP8)
LTV-5136 (LSOP5) / LTV-50L (LSOP6)
LTV-2530 (DIP8 2CH) / LTV-053L (SO8 2CH)

- Working temperature -45°C to 125°C
- 10kV/μs minimum Common Mode Rejection (CMR) at VCM = 1000V.
- High Viso: 3,750-5,000Vrms.
- Digital logic ground isolation.
- Low input current line receiver.
- EIA-RS-232C line receiver.
- Switching Power Supply.
- High common mode noise line receiver.

**High Speed
(5MBd~15MBd Logic
Gate Output)**



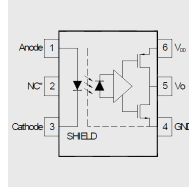
5MBd
LTV-521 (LSOP5) / LTV-K24L (LSOP8 2CH)

10MBd
6N137 (DIP8) / LTV-M601 (SOP5)
LTV-60L (LSOP6) / LTV-2630 (DIP8 2CH)
LTV-W137 (400mil DIP8)
LTV-063L (SOP8 2CH)

15MBd
LTV-K63L/H63L (LSOP8)

- tPLH 90ns max.
- High Viso: 3,750-5,000Vrms.
- 10kV/μs CMR minimum.
- Smart meter data collector
- Server power
- Programmable logic controller
- MCU isolation
- Communication

**High Speed
(10MBd~15MBd
Totem pole output)**

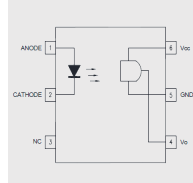


10MBd
LTV-M61L (SOP5) / LTV-61L (LSOP6)
LTV-064L (SOP8-2CH)
LTV-H61L (15mm LSOP8)

15MBd
LTV-561 (LSOP5)

- tPLH 80ns max
- High Viso: 3,750-7,500Vrms.
- 20kV/μs CMR minimum.
- Working temperature -40°C to 105°C, 125°C available.
- 2mm thin-package available in LSOP5.
- Smart meter data collector
- Server power
- Programmable logic controller
- MCU isolation
- Communication

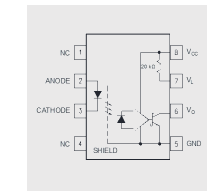
Schmitt Trigger



H11L1 (DIP6)
LTV-M400 (SOP5)

- tPLH 1μs max
- High Viso: 3,750-5,000Vrms.
- 10kV/μs CMR minimum.
- Working temperature -40°C to 100°C.
- Smart meter data collector
- Server power
- Programmable logic controller
- MCU isolation
- Communication
- Home Appliance

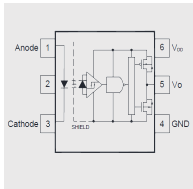
**IPM Driver (Open
Collector Output)**



Open Collector
LTV-4506 (DIP8) / LTV-M456 (SOP5)
LTV-0456 (SOP8) / LTV-5456 (LSOP5)
LTV-456 (LSOP6)
LTV-W4506 (400mil DIP8)

- Vcc from 4.5-30V.
- tPLH 0.55 μs max.
- Working temperature -40°C to 100°C.
- Minimized Pulse Width Distortion (PWD) 450ns.
- 15kV/μs CMR minimum.
- 2mm thin-package available in LSOP5.
- IPM Interface Isolation.
- Isolated IGBT/MOS FET Gate Drivers.
- AC and Brushless DC Motor Driver.
- Industrial Inverters.
- General Digital Isolation.

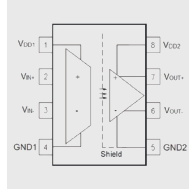
**IPM Driver (Totem
Pole Output)**



H11L1 (DIP6)
LTV-M400 (SOP5)

- Vcc from 4.5-30V.
- tPLH 0.25 μs max.
- Working temperature -40°C to 100°C.
- 250ns.
- Minimized Pulse Width Distortion (PWD) = 120ns.
- 20kV/μs CMR minimum.
- 2mm thin-package, 3.5mA low trigger available.
- IPM Interface Isolation.
- Isolated IGBT/MOS FET Gate Drivers.
- AC and Brushless DC Motor Driver.
- Industrial Inverters.
- General Digital Isolation.

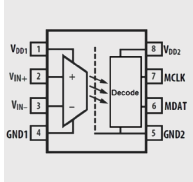
**Isolation Amplifier
(Analog)**



LTV-7840 (DIP8)
LTV-C790

- Gain error at 25°C ±0.5%/±1%/±3%/±5%
- VIN from -200mV to 200mV
- VDD 5.5V max.
- 100 kHz Bandwidth
- 15 kV/μs CMR minimum
- Isolation voltage 5000V
- Operation temperature -40°C to 105°C.
- Current/ Voltage sensing in AC and servo motor drives
- PV inverters, wind turbine inverters
- Industrial process control
- Switching power supply current/ Voltage signal isolation
- Battery management system

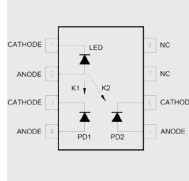
**Isolation Amplifier
(Digital)**



LTV-7560/7860 (DIP8)
LTV-C797 (LSOP8)

- 10MHz internal clock
- Gain error at 25°C ±1%/±5%
- Vin from -200mV to 200mV
- VDD 5.5V max.
- Resolution 8/12/16 bits
- 25 kV/μs CMR minimum
- Isolation voltage 5000V
- Operation temperature -40°C to 105°C.
- Current/ Voltage sensing in AC and servo motor drives
- PV inverters, wind turbine inverters
- Industrial process control
- Switching power supply current/ Voltage signal isolation
- Battery management system

High-linearity Analog



LTV-W200/W201/W300 (400mil DIP8)

- Transfer gain K3 ±5%~±40%
- Operation temperature -55°C to 105°C.
- Power supply feedback current/ voltage
- Medical sensor isolation
- Audio signal interface
- Isolated process control transducers
- Telecom
- Low cost analog isolation

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