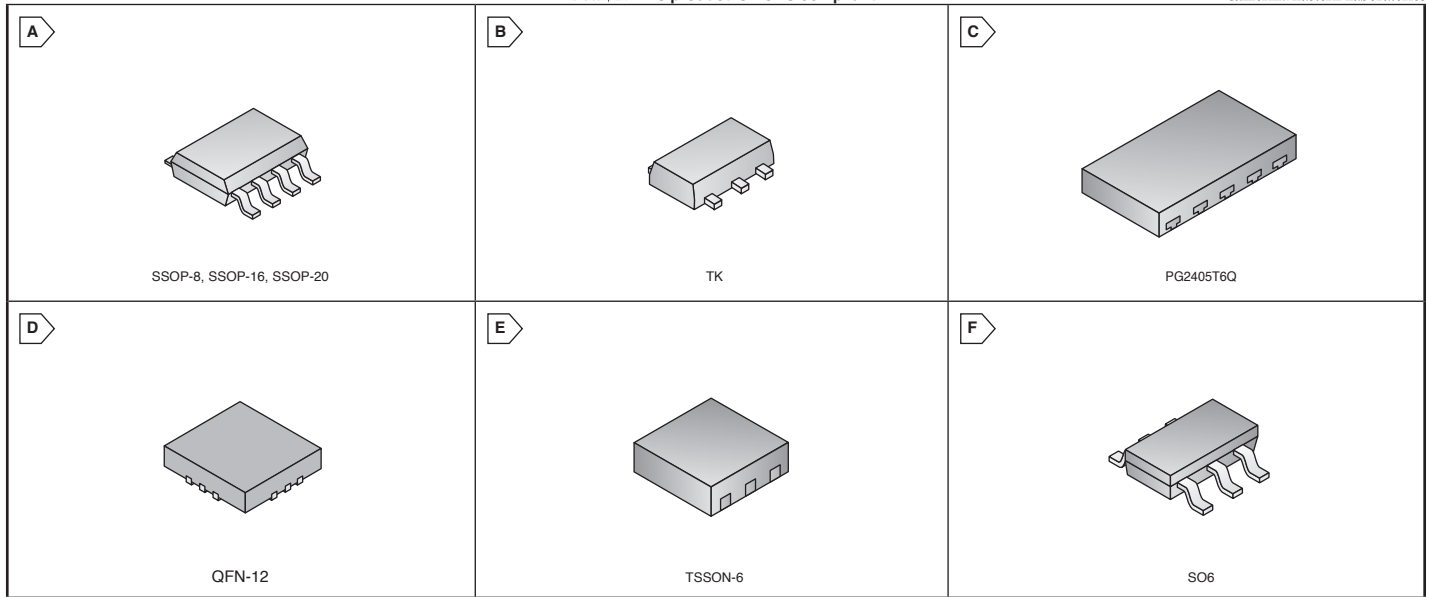


RENESAS/CEL SMD Monolithic Microwave ICs



This product is RoHS compliant.

California Eastern Laboratories



Amplifier ICs
CEL

SILICON MONOLITHIC CIRCUITS

CEL offers a broad range of silicon ICs for multimedia, mobile communications and wireless applications. They are based on a high performance bipolar process featuring f_TS up to 45GHz. The process permits the productions of transistors with lower parasitics, improved passivation and emitter line widths as small as 0.6 microns. It accommodates low operating voltages while offering high operating frequencies, low noise figures, high efficiency and high reliability. These devices operate from 1 to 5 volts; they include amplifiers, prescalers, frequency converters, IQ modulators and demodulators and multifunction ICs for GPS (Global Positioning System), RKE (Remote Keyless Entry) and W-CDMA markets or for cable modems/settop boxes applications.



RoHS Compliant

Electrical Characteristics (TA=25°C)

AGC Amplifiers with Video Output

◆ Surface Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CEL Part No.	Fig.	Freq. Range @ 3dB Down Typ. (MHz)	VCC (V)	ICC (mA)			NF (dB) Typ.	Gain (dB)		ISOL Typ. (dB)	Price Each			
					Min.	Typ.	Max.		Min.	Max.		1	10	100	500
◆ 551-UPC3217GV-A	UPC3217GV-A	A	100	5	15	23	34	6.5	0	53	53	2.97	2.33	2.20	1.87
◆ 551-UPC3218GV-A	UPC3218GV-A	A	100	5	15	23	34	3.5	10	63	53	3.29	2.58	2.44	2.07
◆ 551-UPC3219GV-A	UPC3219GV-A	A	100	5	28	35	42	9.0	0	42	42	3.29	2.58	2.44	2.07
◆ 551-UPC3221GV-A	UPC3221GV-A	A	100	5	26	33	41	4.2	10	60	50	3.10	2.76	2.30	1.95

Variable Gain Amplifier

◆ Surface Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CEL Part No.	Fig.	Freq. Range @ 3dB Down Typ. (MHz)	VCC (V)	ICC (mA)			NF (dB) Typ.	Gain (dB)		RLIN Typ. (dB)	Price Each			
					Min.	Typ.	Max.		Typ.	Max.		1	10	100	500
◆ 551-UPC8204TK-A	UPC8204TK-A	B	800 to 2500	3	8.5	11.5	15	7.5	-26	+14	13.0	3.63	3.07	2.76	2.46

GAAS MONOLITHIC CIRCUITS

CEL offers a broad range of gallium arsenide (GaAs) IC switches for medium to high power applications. They have the same high reliability, low cost technology found in CEL's discrete FET devices

Electrical Characteristics (TA=25°C)



RoHS Compliant

Medium Power 1 W Compact SP3T Switch for WiFi + Bluetooth, NFC-RFID

The μPG2405T6Q is an SP3T GaAs FET switch which was developed for Bluetooth™, wireless LAN and NFC. This device can operate from 10 MHz to 2.5 GHz, with low insertion loss and high linearity.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CEL Part No.	Fig.	Control Voltages	Insertion Loss	Isolation	Input Power (dBm) @0.1dB compression point	Price Each			
							1	10	100	500
551-UPG2405T6Q-A	UPG2405T6Q-A	C	+2.8/0	0.60@2.5GHz	20@2.5GHz	+31dBm	1.71	1.51	1.21	1.08
551-UPG2405T6Q-EVALA	UPG2405T6Q-EVAL-A			Engineering Evaluation Board			130.68	-	-	-

Switches

◆ Surface Mount

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	CEL Part No.	Fig.	Frequency Range (GHz)	Insertion Loss (dB)	Isolation (dB)		RLIN Min./ Typ. (dB)	RLOUT (Through) Min. (dB)	P1dB (dBm)	Switching Speed (ns)	VCONT Control Voltage (V)	Price Each			
					@ 1 GHz	@ 2 GHz						1	10	100	500
SP4T Switches															
◆ 551-UPD5904T7K-E2-A	UPD5904T7K-E2-A	D	0.05-6	0.4	35	30	15/25	15	38	150	0 to +1.3	2.58	2.15	1.72	1.55
SPDT Dual Control Switches															
◆ 551-UPG2158T5K-A	UPG2158T5K-A	E	0.05 to 3.0	0.45	---	19	15/20	15	29.0	50	+6.0	1.16	1.00	.86	.73
◆ 551-UPG2214TB-A	UPG2214TB-A	F	0.5 to 2.5	0.35	27	27	15/20	15	20.0	20	-6.0 to +6.0	.96	.837	.718	.62
◆ 551-UPG2214TK-A	UPG2214TK-A	B	0.5 to 2.5	0.36	27	27	15/20	15	20.0	20	-6.0 to +6.0	1.28	1.09	.94	.81
◆ 551-UPG2155TB-A	UPG2155TB-A	F	0.5 to 2.5	0.4	19	17	15/20	15	38.0	0.001	+6.0	1.55	1.39	1.24	1.08
◆ 551-UPG2030TK-A	UPG2030TK-A	B	0.5 to 2.5	0.55	27	27	---/15	15	30.0	50	-6.0 to +6.0	1.32	1.18	1.02	.866
◆ 551-UPG2009TB-A	UPG2009TB-A	F	100 to 2500	0.5	---	28	---/20	20	36.0	150	+2.5 to +5.3	1.86	1.60	1.38	1.17
◆ 551-UPG2179TB-A	UPG2179TB-A	F	100 to 2500	0.3	---	27	15/20	15	32.0	50	+2.5 to +5.3	1.21	1.04	.897	.761