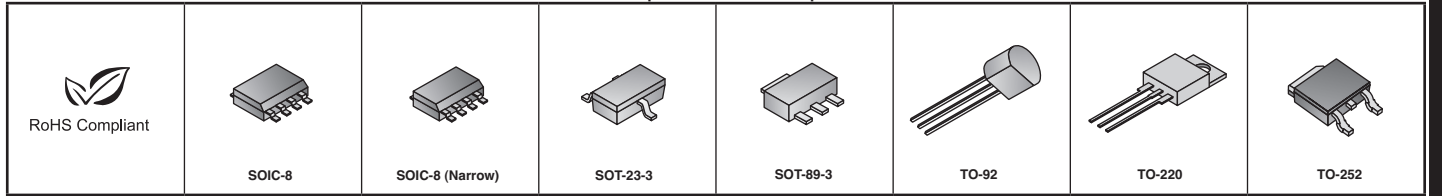


# SUPERTEX Enhancement & Depletion Mode MOSFETs *Supertex*

RoHS Compliant. This product is RoHS compliant.



MOSFETS

## SUPERTEX N-CHANNEL ENHANCEMENT-MODE MOSFETS (CONT.)

◆ Surface Mount Device

† Low Threshold

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package Type	Drain-to-Source Breakdown Voltage	Gate Threshold Voltage		Drain-to-Source ON-State Resistance	ON-State Drain Current	Input Capacitance	Turn-ON/ Turn-OFF Delay Time		Power Dissipation	Price Each			
			BV <sub>DSS</sub>	V <sub>GS(th)</sub>		I <sub>D(ON)</sub>	I <sub>D(ON)</sub>	C <sub>ISS</sub>	t <sub>(ON)</sub>	t <sub>(OFF)</sub>	@ TA=25°C	1	100	500	1000
			Min. (V)	Min. (V)	Max. (V)	Max. (Ω)	Min. (A)	(pF)	Max. (ns)	Max. (ns)	(W)				
◆ 689-VN2410L-G	VN2410L-G	TO-92	240	0.8	2	10	1	125	8	23	1	.79	.52	.48	.476
◆ 689-TN2124K1-G	TN2124K1-G	SOT-23-3	240	0.8	2	15	0.14	38	7	10	0.36	.46	.38	.35	.34
† 689-VN2224N3-G	VN2224N3-G	TO-92	240	1	3	1.25	5	300	15	90	1	2.07	1.72	1.59	1.53
◆ 689-TN5325N3-G	TN5325N3-G	TO-92	250	0.6	2	7	1.2	70	20	25	0.74	.50	.414	.389	.364
◆ 689-TN5325K1-G	TN5325K1-G	SOT-23-3	250	0.6	2	7	1.2	110	20	25	0.74	.36	.30	.28	.27
◆ 689-TN2425N8-G	TN2425N8-G	SOT-89-3	250	0.8	2.4	3.5	0.8	105	15	35	1.6	.86	.71	.66	.63
◆ 689-TN2130K1-G	TN2130K1-G	SOT-23-3	300	0.8	2.4	25	0.25	35	10	12	0.36	.46	.38	.35	.34
◆ 689-TN2535N8-G	TN2535N8-G	SOT-89-3	350	1	2	10	1	125	20	25	1.6	.86	.71	.66	.63
◆ 689-TN5335K1-G	TN5335K1-G	SOT-23-3	350	0.6	2	15	0.75	65	20	25	0.36	.53	.44	.41	.39
◆ 689-TN2435N8-G	TN2435N8-G	SOT-89-3	350	0.8	2.4	6	1	200	20	40	1.6	.89	.74	.69	.66
◆ 689-VN4012L-G	VN4012L-G	TO-92	400	0.6	1.8	12	0.15	110	20	65	1	1.06	.88	.82	.78
† 689-TN2640L-G	TN2640L-G	SOIC-8 (N)	400	0.8	2	5	2	180	15	25	1.3	1.29	1.07	.99	.95
† 689-TN2640N3-G	TN2640N3-G	TO-92	400	0.8	2	5	2	180	15	25	1	1.03	.85	.79	.76
† 689-TN2540N3-G	TN2540N3-G	TO-92	400	0.6	2	12	1	95	20	25	1	.95	.795	.727	.704
◆ 689-TN2540N8-G	TN2540N8-G	SOT-89-3	400	0.6	2	12	1	95	20	25	1.6	.89	.74	.69	.66
† 689-VN2450N3-G	VN2450N3-G	TO-92	500	1.5	4	13	0.5	150	10	25	1	.97	.81	.74	.71
◆ 689-VN2450N8-G	VN2450N8-G	SOT-89-3	500	1.5	4	13	0.5	150	10	25	1.6	1.03	.85	.79	.76
◆ 689-VN0550N3-G	VN0550N3-G	TO-92	500	2	4	60	0.15	45	10	10	1	.99	.82	.76	.73
◆ 689-VN2460N3-G	VN2460N3-G	TO-92	600	1.5	4	20	0.25	150	10	25	1	.93	.777	.72	.685
◆ 689-VN2460N8-G	VN2460N8-G	SOT-89-3	600	1.5	4	20	0.25	150	10	25	1.6	.82	.68	.63	.60

Supertex

## SUPERTEX N & P-CHANNEL ENHANCEMENT-MODE MOSFETS

For quantities greater than listed, call for quote.

◆ 689-TC2320TG-G	TC2320TG-G	SOIC-8	200/200	0.6/-1.0	2.0/-2.4	7/12	1.0/-0.2	110/125	20/10	25/20	-----	1.77	1.47	1.36	1.30
◆ 689-TC6320TG-G	TC6320TG-G	SOIC-8	200/200	1.0/-1.0	2.0/-2.4	7/8	1.0/-1.0	110/200	10/10	20/20	-----	1.86	1.55	1.43	1.37

## SUPERTEX DEPLETION MODE N-CHANNEL MOSFETS

### Advanced Vertical DMOS Technology N-Channel Depletion Mode Vertical DMOS FETs

These depletion-mode (normally-on) transistors utilize an advanced vertical DMOS structure and Supertex's well-proven silicon-gate manufacturing process. This combination produces devices with the power handling capabilities of bipolar transistors and with the high input impedance and positive temperature coefficient inherent in MOS devices. Characteristic of all MOS structure, these devices are free from thermal runaway and thermally-induced secondary breakdown. Supertex's vertical DMOS FETs are ideally suited to a wide range of switching and amplifying applications where high breakdown voltage, high input impedance, low input capacitance, and fast switching speeds are desired.

#### Features:

- High input impedance
- Low input capacitance
- Fast switching speeds
- Low on resistance
- Free from secondary breakdown
- Low input and output leakage

#### Applications:

- Normally-on switches
- Solid state relays
- Converters
- Constant current sources
- Power supply circuits
- Telecom

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package Type	Drain-to-Source Breakdown Voltage	Drain-to-Source ON-State Resistance	Drain-to-Source Current	Gate-to-Source OFF Voltage		Reverse Recovery Time	Power Dissipation	Price Each			
			BV <sub>DSS</sub>	R <sub>DS(ON)</sub>	I <sub>DSS</sub>	V <sub>GS(OFF)</sub>		T <sub>rr</sub>	@ TA=25°C	1	100	500	1000
			Min. (V)	Max. (Ω)	Min. (mA)	Min. (V)	Max. (V)	TYP (ns)	(W)				
◆ 689-DN3525N8-G	DN3525N8-G	SOT-89-3	250	6	300	-1.5	-3.5	800	1.6	.80	.66	.61	.59
◆ 689-DN3535N8-G	DN3535N8-G	SOT-89-3	350	10	200	-1.5	-3.5	800	1.6	.82	.68	.63	.60
◆ 689-DN2540N5-G	DN2540N5-G	TO-220	400	25	150	-1.5	-3.5	800	15	1.60	1.33	1.23	1.18
◆ 689-DN3145N8-G	DN3145N8-G	SOT-89-3	450	60	120	-1.5	-3.5	800	1.3	.82	.68	.63	.60
◆ 689-DN3545N3-G	DN3545N3-G	TO-92	450	20	200	-1.5	-3.5	800	.74	.82	.68	.63	.60
◆ 689-DN3545N8-G	DN3545N8-G	SOT-89-3	450	20	200	-1.5	-3.5	800	1.6	.89	.74	.69	.66

### Advanced Lateral DMOS Technology N-Channel Depletion Mode MOSFETs

The LND1 and LND2 are high voltage N-channel depletion-mode (normally-on) transistors utilizing Supertex's lateral DMOS technology. The gate is ESD protected. The LND1 and LND2 are ideal for high voltage applications in the areas of normally-on switches, precision constant current sources, voltage ramp generation and amplification.

#### Features:

- High input impedance and low C<sub>ISS</sub>
- Low power drive requirement
- ESD gate protection
- Ease of paralleling
- Excellent thermal stability
- Integral source-drain diode

#### Applications:

- Normally-on switches
- Solid state relays
- Converters
- Constant current sources
- Power supply circuits
- Input protection circuits

For quantities greater than listed, call for quote.

◆ 689-LND150N3-G	LND150N3-G	TO-92	500	1000	1	-1	-3	200	.74	.69	.577	.527	.514
◆ 689-LND150N8-G	LND150N8-G	SOT-89-3	500	1000	1	-1	-3	200	1.6	.72	.60	.55	.53

## SUPERTEX N-CHANNEL IGBT (INSULATED GATE BIPOLAR TRANSISTOR) MOSFET

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package Type	Collector Emitter Breakdown Voltage	Collector Current	Power Dissipation @25°C	Gate Threshold Voltage		Delay Time		Rise/Fall Times	Price Each			
			Min. (V)	Max. (A)	Max. (W)	Min. (V)	Max. (V)	Min. (V)	Max. (V)	Max. (ns)	1	100	500	1000
◆ 689-GN2470K4-G	GN2470K4-G	TO-252	700	1	2.5	1.5	3.5	15	50	600/12000	.84	.70	.64	.62