Features

- ESD Protected up to 2KV (HBM)
- High Dense Cell Design For Extremely Low RDS(ON)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. “Green” Device
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

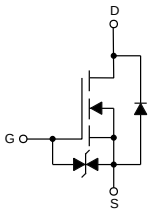
N-CHANNEL MOSFET

Maximum Ratings

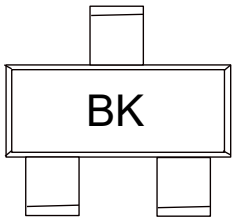
- Operating Junction Temperature Range : -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 500°C/W Junction to Ambient

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	50	V
Gate-Source Volltage		V_{GS}	±20	V
Continuous Drain Current		I_D	0.37	A
Pulsed Drain Current		I_{DM}	1.48	A
Total Power Dissipation	T_A=25°C	P_D	0.25	W

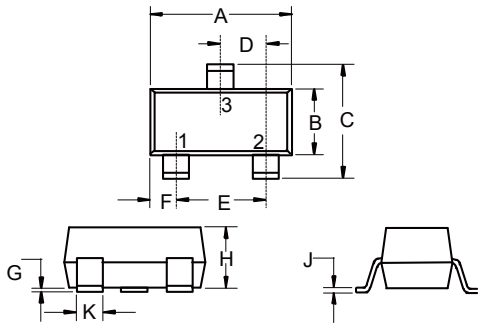
Internal Structure and Marking Code



1. GATE
2. SOURCE
3. DRAIN

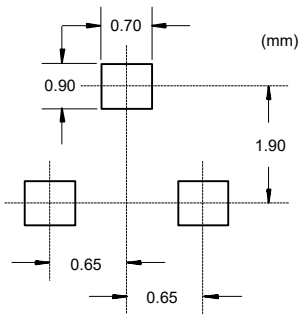


SOT-323



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026		0.65		TYP.
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.044	0.90	1.10	
J	0.002	0.010	0.05	0.25	
K	0.006	0.016	0.15	0.40	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Static Characteristics						
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	V_{GS}=0V, I_D=250μA	50			V
Gate-Source Leakage Current	I_{GSS}	V_{DS}=0V, V_{GS} =±20V			±10	μA
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=50V, V_{GS}=0V			1	μA
Gate-Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=250μA	0.5		1.5	V
Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V, I_D=0.3A		1	1.5	Ω
		V_{GS}=4.5V, I_D=0.2A		1.1	2.3	
		V_{GS}=2.5V, I_D=0.1A		1.6	4.1	
Diode Forward Voltage	V_{SD}	V_{GS}=0V, I_S=0.3A			1.4	V
Dynamic Characteristics						
Input Capacitance	C_{iss}	V_{DS}=30V,V_{GS}=0V,f=1MHz		58		pF
Output Capacitance	C_{oss}			16		
Reverse Transfer Capacitance	C_{rss}			9.4		
Total Gate Charge	Q_g	V_{DS}=30V,V_{GS}=10V,I_D=0.3A		1.5		nC
Gate-Source Charge	Q_{gs}			0.3		
Gate-Drain Charge	Q_{gd}			0.2		
Turn-On Delay Time	$t_{d(on)}$	V_{DS}=30V, V_{GEN}=10V, R_G=3.9Ω, R_L=100Ω, I_{DS}=0.3A		2.5		ns
Turn-On Rise Time	t_r			2		
Turn-Off Delay Time	$t_{d(off)}$			9.2		
Turn-Off Fall Time	t_f			7.7		

Curve Characteristics

Fig. 1 - Typical Output Characteristics

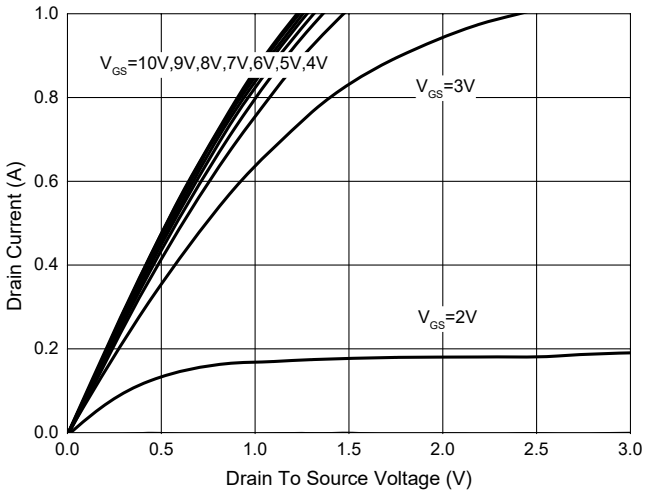


Fig. 2 - $R_{DS(ON)}$—I_D

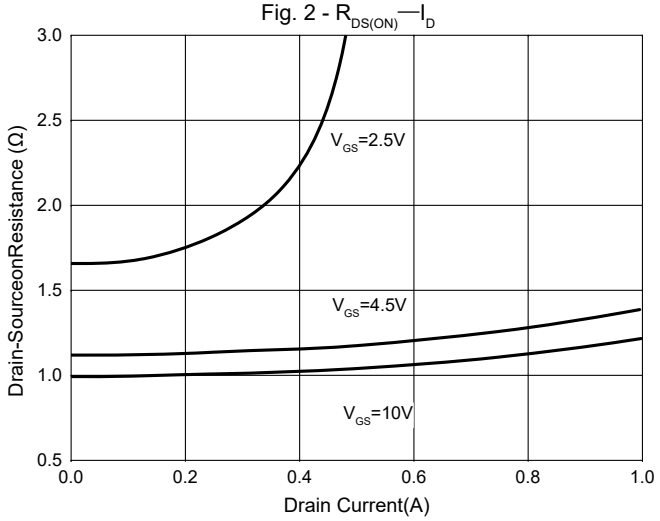


Fig. 3 - Normalized On Resistance Characteristics

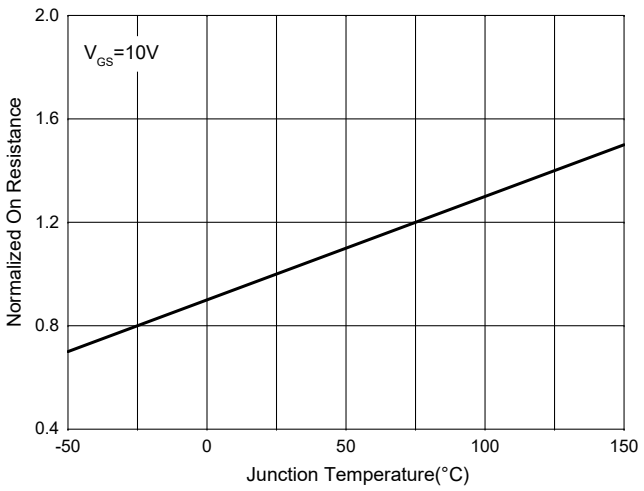


Fig. 4 - I_S—V_{SD}

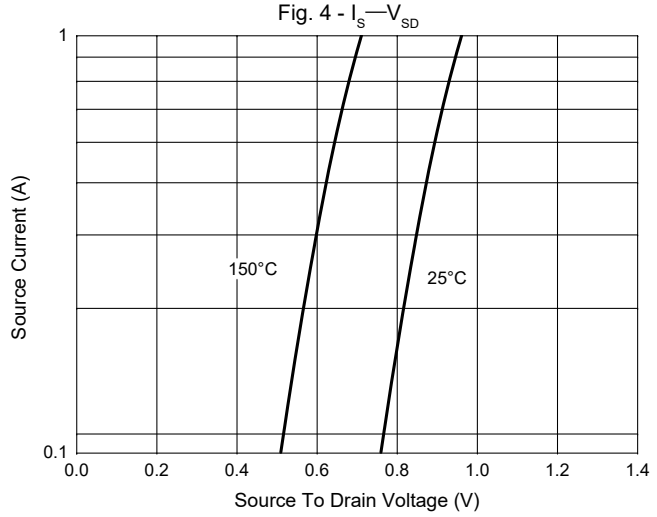


Fig. 5 - Capacitance Characteristics

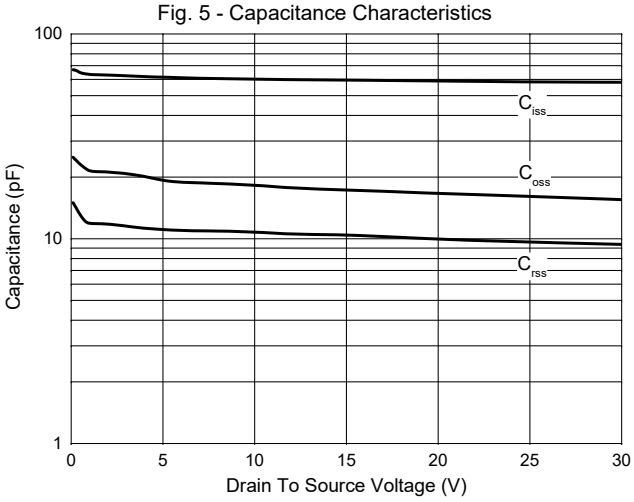
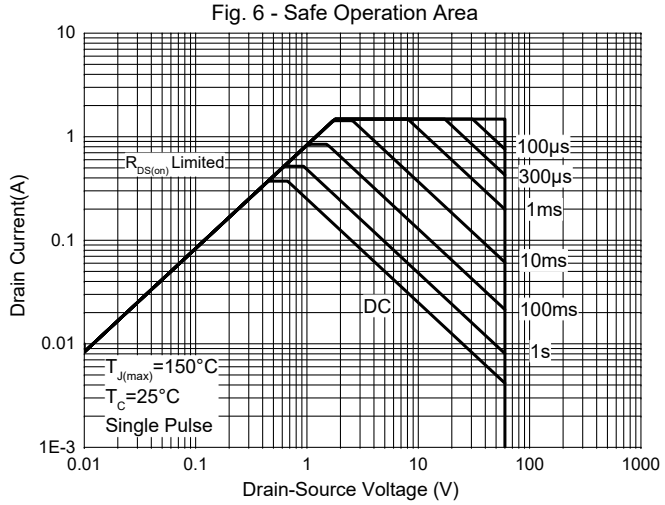
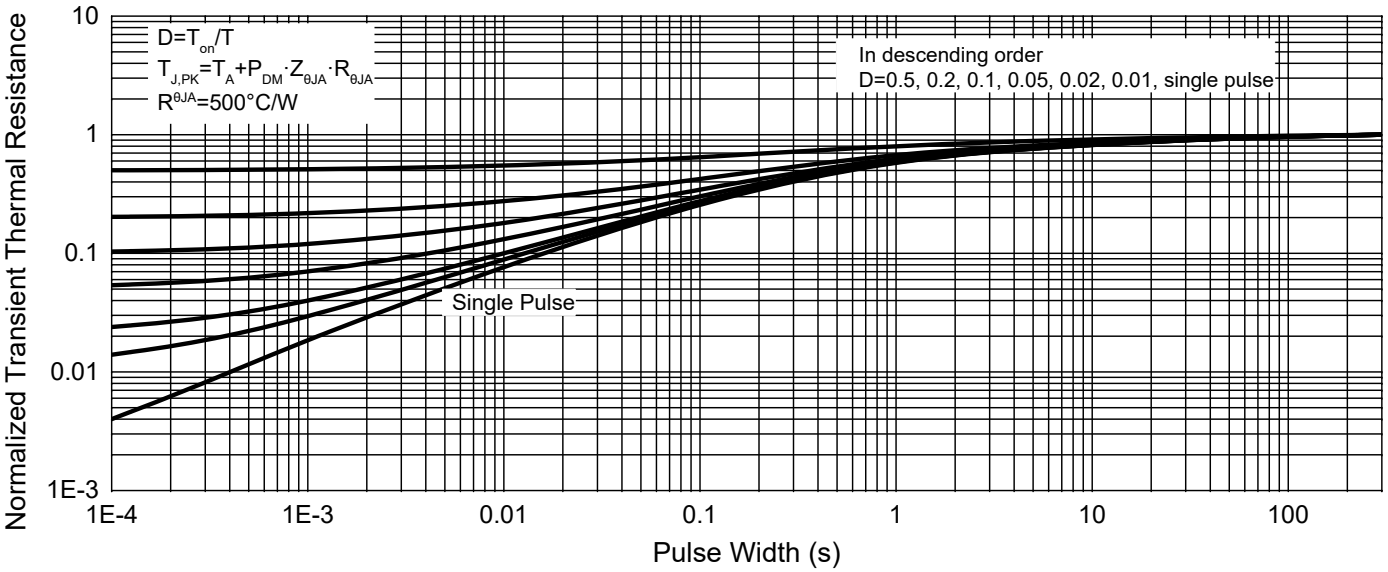


Fig. 6 - Safe Operation Area



Curve Characteristics

Fig. 7 - Normalized Transient Thermal Impedance



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

单击下面可查看定价，库存，交付和生命周期等信息

>>MCC(美微科)