Features

- High Density Cell Design for Extremely Low $R_{DS(ON)}$
- Rugged and Reliable
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Dual N-Channel Mosfet

Maximum Ratings

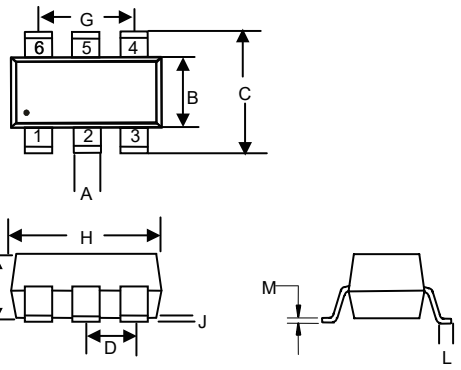
- Operating Junction Temperature Range : -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 100°C/W Junction to Ambient(Note1)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	20	V
Gate-Source Volltage	V_{GS}	±8	V
Continuous Drain Current	I_D	3	A
Pulsed Drain Current(Note2)	I_{DM}	10	A
Total Power Dissipation	P_D	1.25	W

Note 1. Surface Mounted on FR4 Board, t < 10 sec.

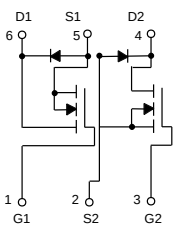
2. Repetitive Rating : Pulse Width Limited by Maximum Junction Temperature.

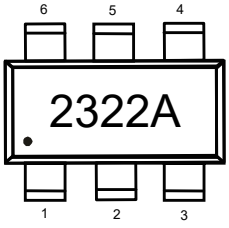
SOT23-6L



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.012	0.020	0.30	0.50	
B	0.051	0.070	1.30	1.80	
C	0.087	0.126	2.20	3.20	
D	0.037		0.95		TYP.
G	0.074		1.90		TYP.
H	0.106	0.122	2.70	3.10	
J	0.002	0.006	0.05	0.15	
K	0.030	0.051	0.75	1.30	
L	0.012	0.024	0.30	0.60	
M	0.003	0.008	0.08	0.22	

Internal Structure and Marking Code





Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Off Characteristics						
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	V_{GS}=0V, I_D=10μA	20			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} =20V, V_{GS} =0V			1	μA
Gate-Source Leakage Current	I_{GSS}	V_{DS} =0V, V_{GS} =±8V			±100	nA
On Characteristics(Note 3)						
Gate-Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=50μA	0.55		1.25	V
Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=4.5V, I_D=3.6A		20	30	mΩ
		V_{GS}=2.5V, I_D=3.1A		30	40	
Forward Tranconductance	g_{FS}	V_{DS}=5V, I_D=3.6A		8.5		S
Dynamic Characteristics(Note 4)						
Input Capacitance	C_{iss}	V_{DS}=10V,V_{GS}=0V,f =1MHz		500		pF
Output Capacitance	C_{oss}			100		
Reverse Transfer Capacitance	C_{rss}			60		
Switching Characteristics(Note 4)						
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=4.5V,V_{DD}=10V,I_D=3.6A, R_{GEN}=6Ω		23	45	ns
Turn-On Rise Time	t_r			11	30	
Turn-Off Delay Time	$t_{d(off)}$			34	70	
Turn-Off Fall Time	t_f			36	70	
Total Gate Charge	Q_g	V_{DS}=10V, I_D=3.6A,V_{GS}=4.5V		6	10	nC
Gate-Source Charge	Q_{gs}			1.4		
Gate-Drain Charge	Q_{gd}			1.8		
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Current	I_S				3	A
Diode Forward Voltage(Note 3)	V_{SD}	V_{GS}=0V, I_S=3A			1.2	V

Note: 3. Pulse Test : Pulse Width≤300μs, Duty Cycle ≤ 2%.

4. Guaranteed by Design, Not Subject to Production Testing.

Curve Characteristics

Fig. 1 - Typical Output Characteristics

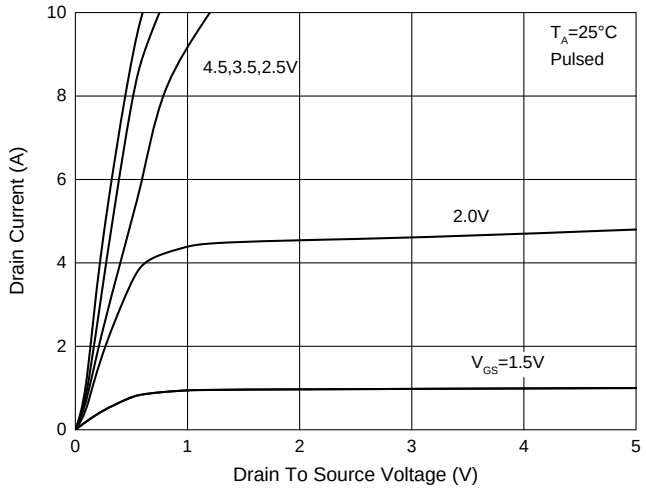


Fig. 2 - Transfer Characteristics

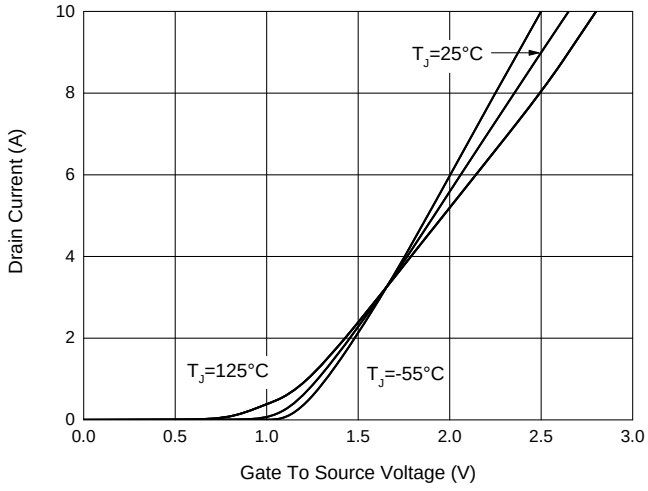


Fig. 3 - Capacitance Characteristics

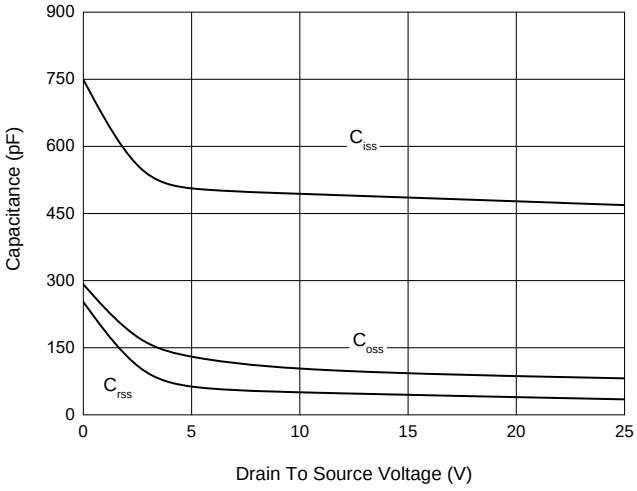


Fig. 4 - Normalized On-Resistance

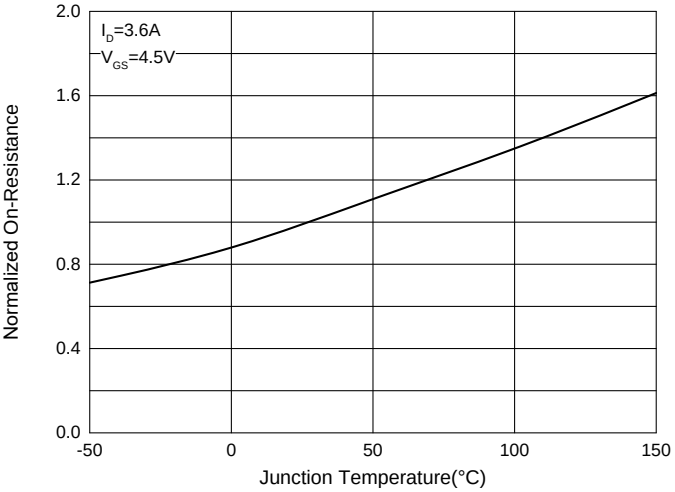


Fig. 5 - Threshold Voltage Characteristics

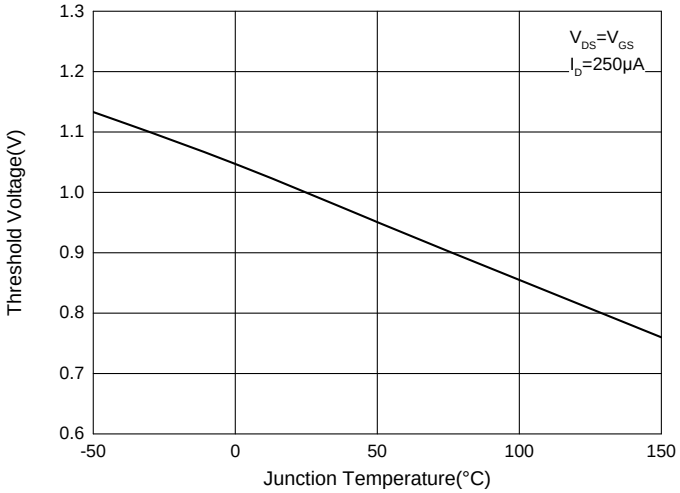
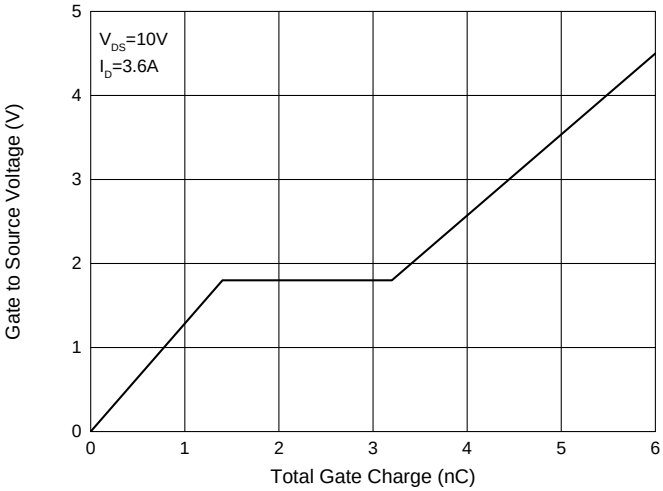


Fig. 6 - Total Gate Charge Characteristics



Ordering Information

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

Note : Adding "-HF" Suffix for Halogen Free, eg. Part Number-TP-HF

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)