Features

- TrenchFET Power MOSFET
- Low $R_{DS(ON)}$
- 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)

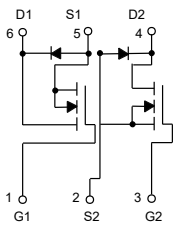
N-Channel MOSFET

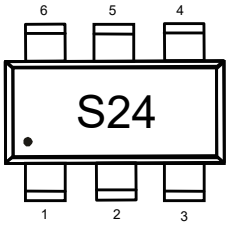
Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 85°C/W Junction to Ambient

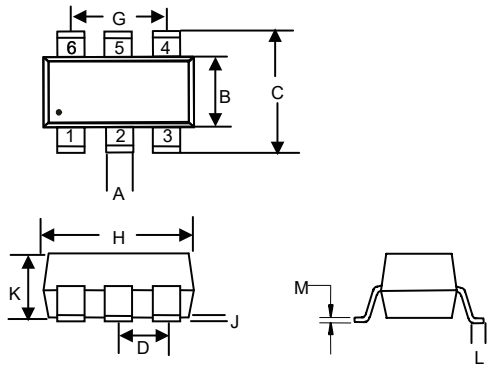
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	±20	V
Drain Current-Continuous	I_D	2.0	A
Power Dissipation	P_D	1.5	W

Internal Structure and Marking Code





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	

ELECTRICAL CHARACTERISTICS (Ta=25℃ 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	100			V
Gate-Threshold Voltage(Note1)	$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=250μA	1.0	1.5	2.0	V
Gate-Body Leakage Current	I_{GSS}	V_{GS}=± 20V, V_{DS}=0V			±100	nA
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=100V, V_{GS}=0V			1	μA
Drain-Source On-Resistance(Note1)	$R_{DS(on)}$	V_{GS}=10V, I_D=2.0A		250	280	mΩ
		V_{GS}=4.5V, I_D=2.0A		260	300	
Forward Transconductance	g_{FS}	V_{DS}=5V, I_D=2.0A	2.0			S
Dynamic Characteristics(Note2)						
Input Capacitance	C_{iss}	V_{DS}=15V,V_{GS}=0V, f=1MHz		520		pF
Output Capacitance	C_{oss}			130		
Reverse Transfer Capacitance	C_{rss}			36		
Switching Characteristics(Note2)						
Turn-On Delay Time	$t_{d(on)}$	V_{DD}=10V,R_L=2.8Ω,V_{GS}=4.5V, I_D=1A,R_{GEN}=6Ω		12		ns
Turn-On Rise Time	t_r			52		
Turn-Off Delay Time	$t_{d(off)}$			17		
Turn-Off Fall Time	t_f			10		
Total Gate Charge	Q_g	V_{DS}=10V,V_{GS}=4.5V,I_D=2A		4.8		nc
Gate-Source Charge	Q_{gs}			1.2		
Turn-Off Fall Time	Q_{gd}			1.7		
Source-Drain Diode characteristics						
Drain-Source Diode Forward Current	I_S				2.0	A
Diode Forward voltage	V_{SD}	V_{GS}=0V,I_S=2A		0.9	1.2	V

Notes:
1.Pulse Test: Pulse Width≤300μA, Duty Cycle≤2%.
2.These parameters have no way to verify.

Curve Characteristics

Fig. 1 - Output Characteristics

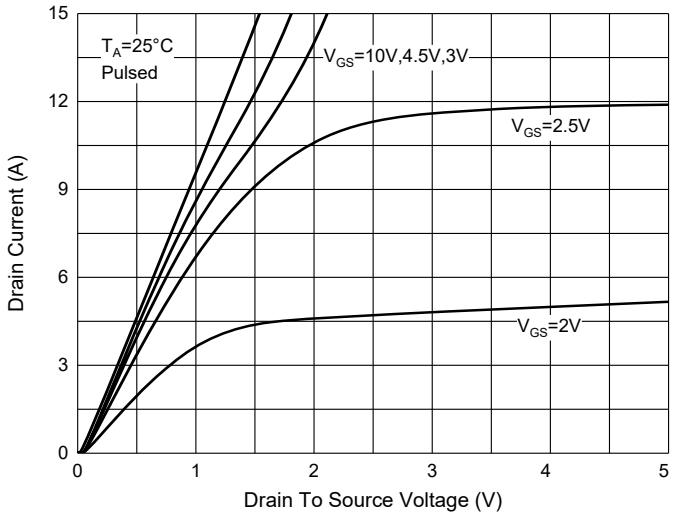


Fig. 2 - Transfer Characteristics

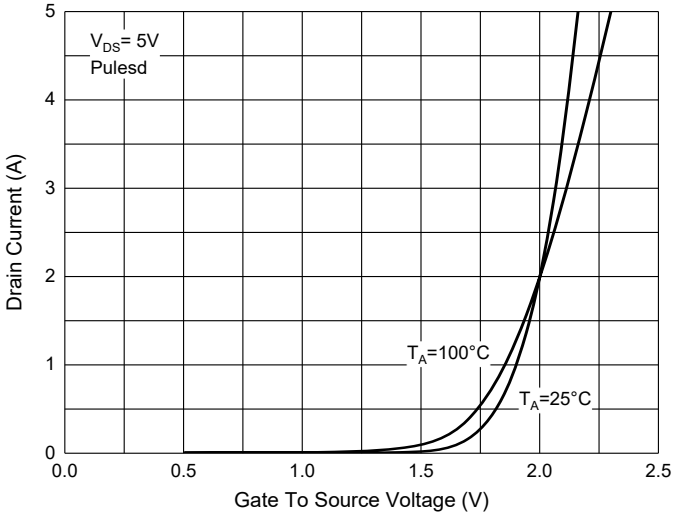


Fig. 3 - I_S—V_{SD}

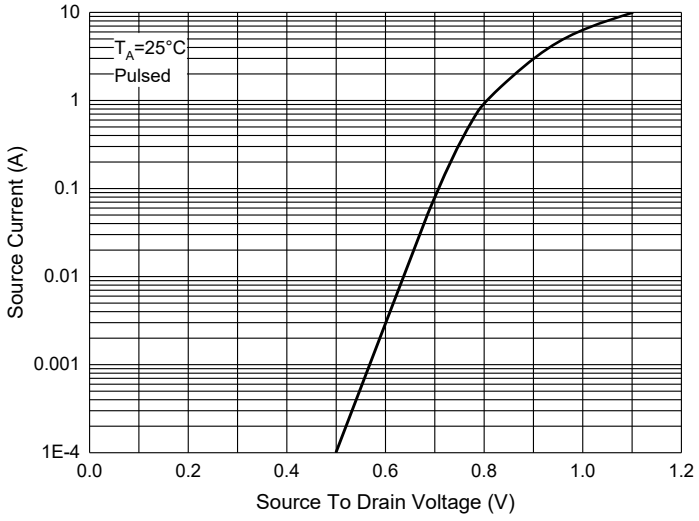
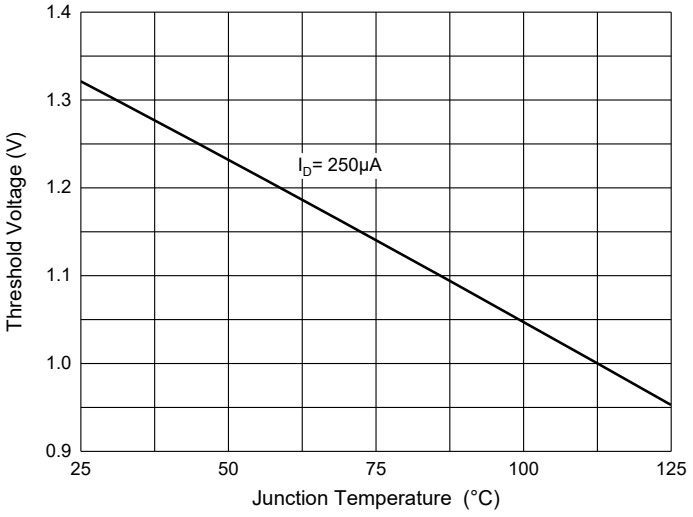


Fig. 4 - Threshold Voltage



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)