N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	60V
I_D	5.0A
$R_{DS(ON)}$(at V_{GS}=10V)	43m
$R_{DS(ON)}$(at V_{GS}=4.5V)	47m

General Description

Low $R_{DS(on)}$ & FOM
Extremely low switching loss

Epoxy Meets UL 94 V-0 Flammability Rating
-Q101 qualified
Halogen Free

Applications

Absolute Maximum Ratings (T_A=25 unless otherwise noted)

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	60	V
Gate-source Voltage		V_{GS}	± 20	V
Drain Current	T_A=25	I_D	5	A
	T_A=100		3	
Pulsed Drain Current [A]		I_{DM}	20	A
Total Power Dissipation [C]	T_A=25	P_D	1.25	W
	T_A=100		0.5	
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +150	

Thermal resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient [D]	Steady-State	R	80	100	/W

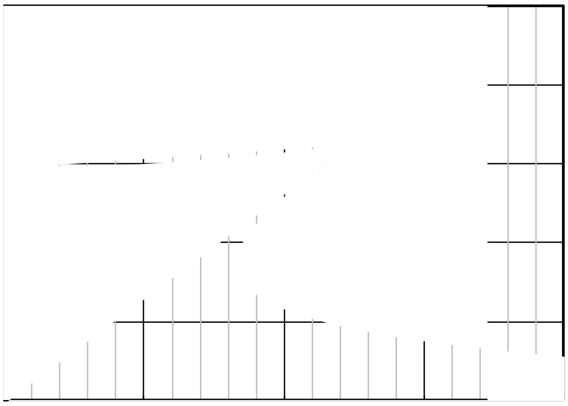


Figure 7. RDS(on) VS Drain Current

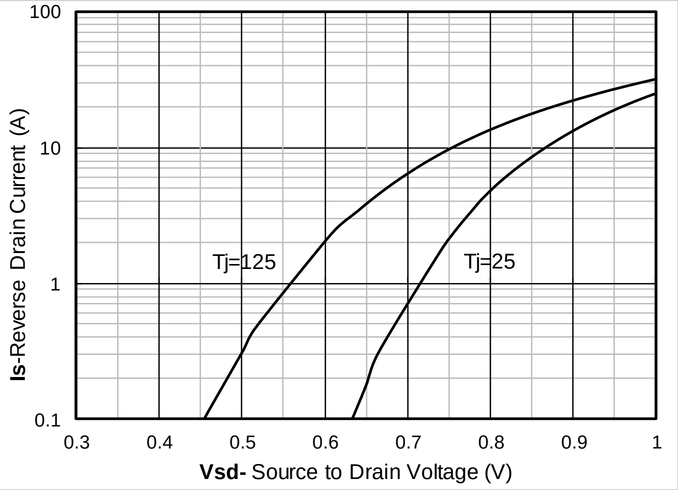


Figure 8. Forward characteristics of reverse diode

Figure 9. Normalized breakdown voltage

Figure 10. Normalized Threshold voltage

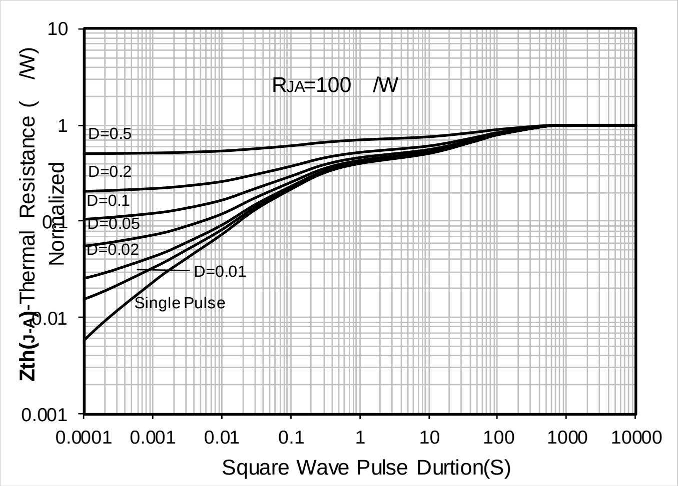


Figure 11. Maximum Transient Thermal Impedance

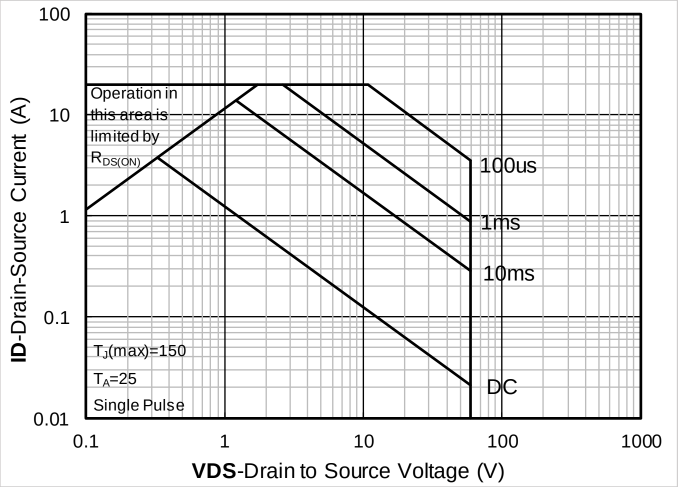
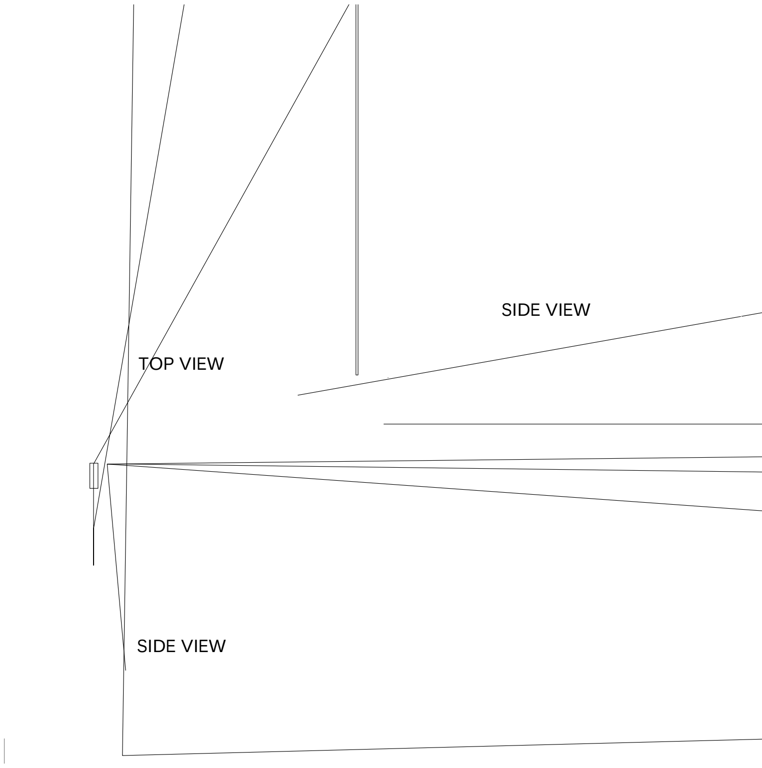


Figure 12. Safe Operation Area

SOT-23-6L Package information



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.012	0.020		
B	0.059	0.067		
C	0.104	0.116		
D				
G				
H				
J				
K	0.041	(		
L				
M				
θ θ	0°	8°	0°	8°

Disclaimer

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