



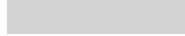
Product Summary

It combines advanced trench MOSFET technology with a low resistance package to provide extremely low  $R_{DS(ON)}$ .

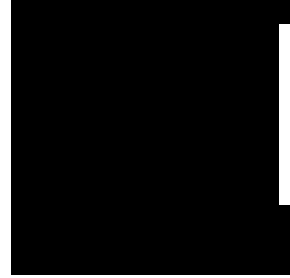


Trench technology

$R_{DS(ON)}$  to minimize conductive loss



nd Synchronous Rectifier




$T_c = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	150	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current	$I_{D@TC=25}$	60	A
	$I_{D@TC=75}$	45	A
	$I_{D@TC=100}$	37	A
Pulsed Drain Current	$I_{DM}$	180	A
Total Power Dissipation( $TC=25$ )	$P_D@TC=25$	125	W
Total Power Dissipation( $TA=25$ )	$P_D@TA=25$	2.5	W
Operating Junction Temperature	$T_J$	-55 to 150	
Storage Temperature	$T_{STG}$	-55 to 150	
Single Pulse Avalanche Energy@ $L=0.1mH$	$E_{AS}$	200	mJ



**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R <sub>thJC</sub>	-	-	1.5	°



Body Diode Reverse Recovery Charge	Qrr			120		
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Note:

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Fig.1 Maximum Safe Operating Area

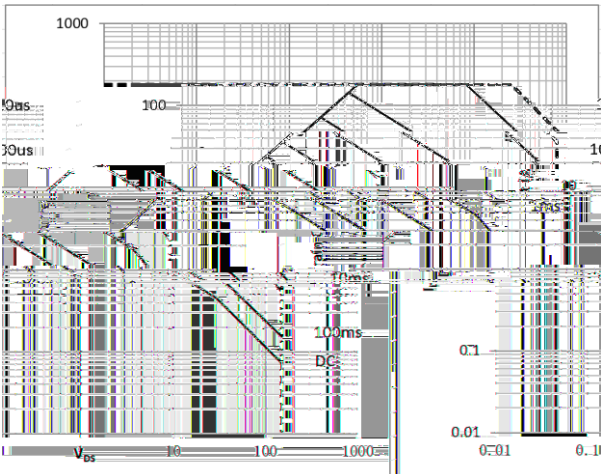


Fig.2 Capacitance Characteristics

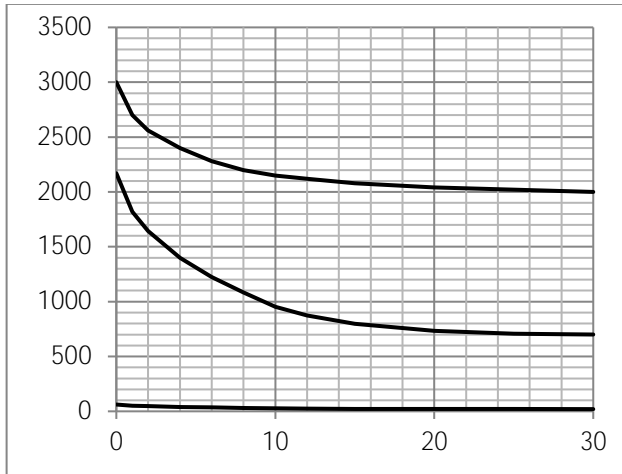


Fig.3 Power Dissipation Derating Curve

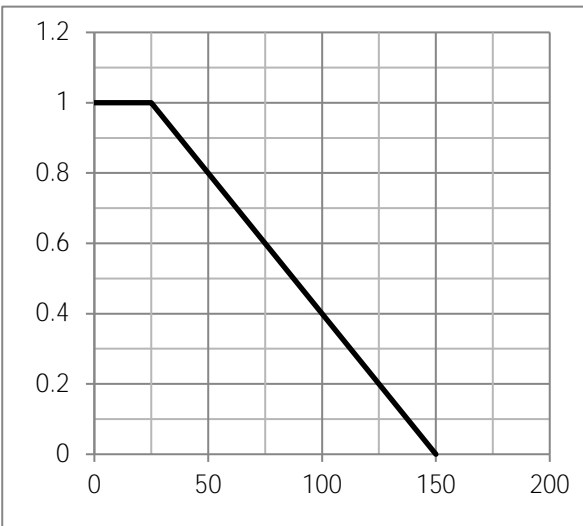


Fig.4 Typical output Characteristics

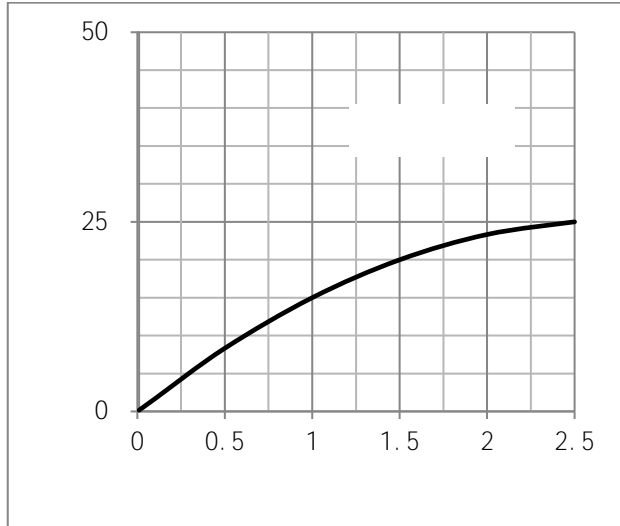




Fig.5 Threshold Voltage V.S Junction Temperature    Fig.6 Resistance V.S Drain Current

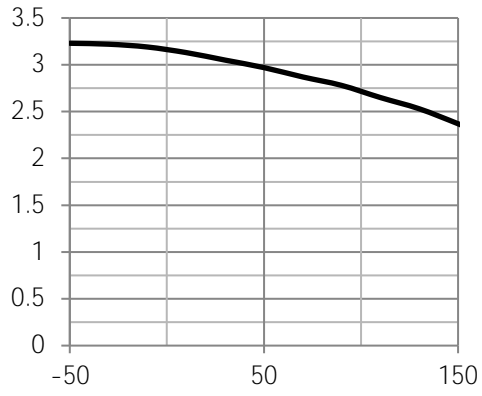


Fig.7 Switching Time Measurement Circuit

Fig.8 Gate Charge Waveform





(TO-220)

Unit mm

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