

 $T_C = 25$ 

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DS}$	100	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current	$I_{D@TC=25}$	100	A
	$I_{D@TC=75}$	76	A
	$I_{D@TC=100}$	63	A
Pulsed Drain Current	$I_{DM}$	400	A
Total Power Dissipation	$P_D@TC=25$	85	W
Total Power Dissipation	$P_D@TA=25$	3.4	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
Avalanche Current@L=0.1mH	$I_{AS}$	35	A

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	$R_{thJC}$	-	-	2.8	° C/W
Thermal resistance, junction - ambient	$R_{thJA}$	-	-	62	° C/W
Soldering temperature, wave soldering for 10s	$T_{sold}$	-	-	265	° C

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	100			V

Gate Threshold Voltage

Note:

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Fig.1 Gate-Charge Characteristics

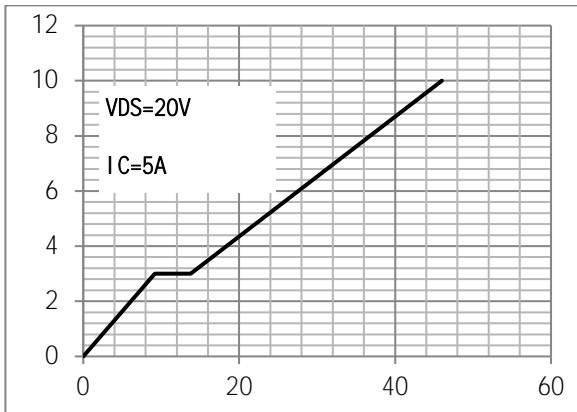


Fig.2 Capacitance Characteristics

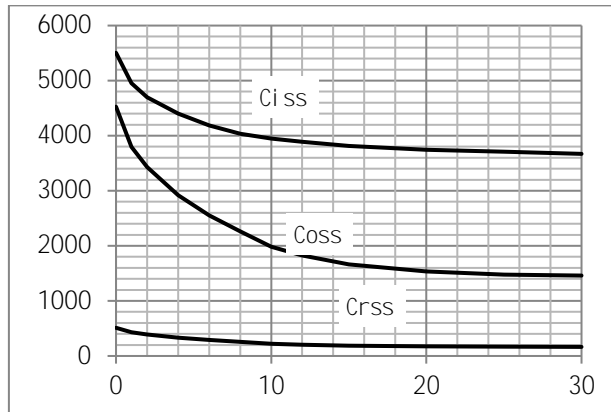


Fig.3 Power Dissipation

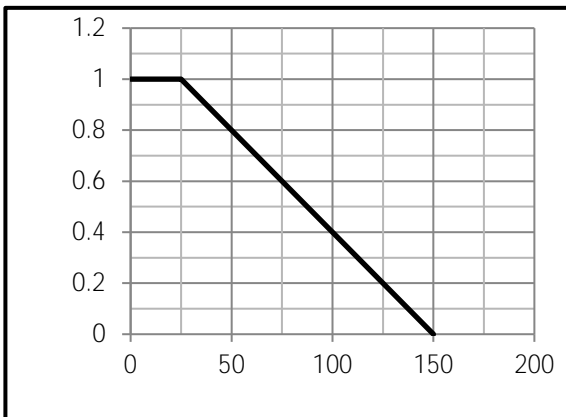


Fig.4 Typical output Characteristics

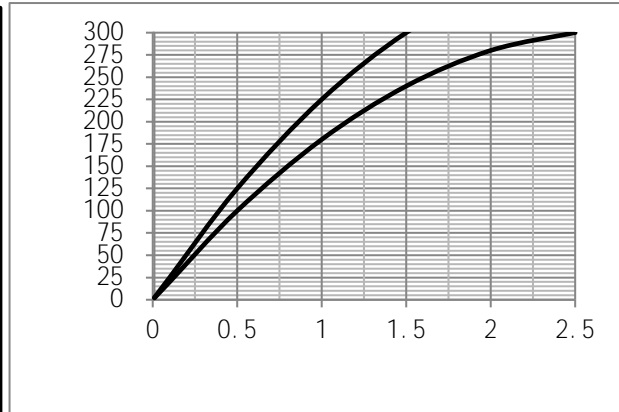


Fig.5 Threshold Voltage V.S Junction Temperature

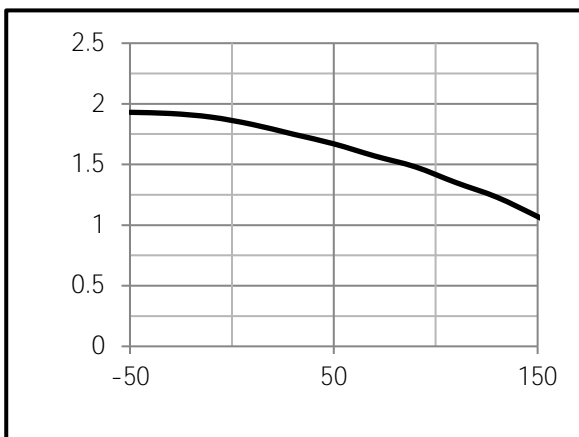


Fig.6 Resistance V.S Drain Current

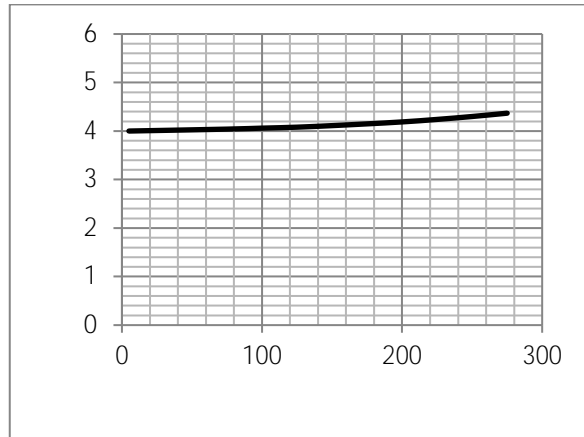




Fig.9 SOA Maximum Safe Operating Area

Fig.10 ID-Junction Temperature

Fig.11 Switching Time Measurement Circuit

Fig.12 Gate Charge Waveform



Fig.13 Switching Time Measurement Circuit

Fig.14 Gate Charge Waveform

Fig.15 Avalanche Measurement Circuit

Fig.16 Avalanche Waveform

