

**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

Electronic Characteristics

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS} = 0V, I_D = 250\mu A$	120			V
Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS} = V_{DS}, I_D = 250\mu A$	2.0		4.0	V
Drain-Source Leakage Current	I_{DSS}	$V_{DS} = 120V, V_{GS} = 0V$			1.0	μA
Gate- Source Leakage Current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0V$			± 100	nA
Static Drain-source On Resistance	$R_{DS(ON)}$	$V_{GS} = 10V, I_D = 25A$		6.0	7.8	m
Forward Transconductance	g_{FS}	$V_{DS} = 25V, I_D = 10A$		40		s

Source-



Fig.1 Gate-Charge Characteristics

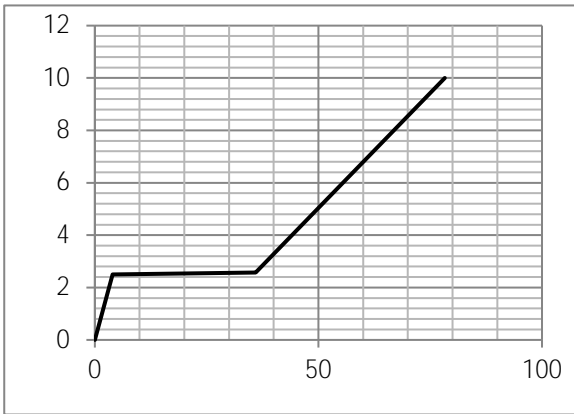


Fig.2 Capacitance Characteristics

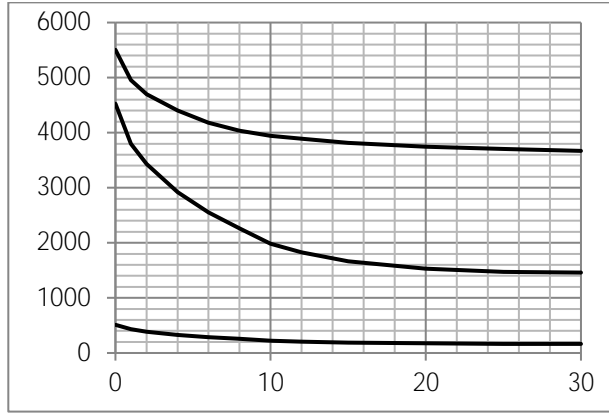


Fig.3 Power Dissipation

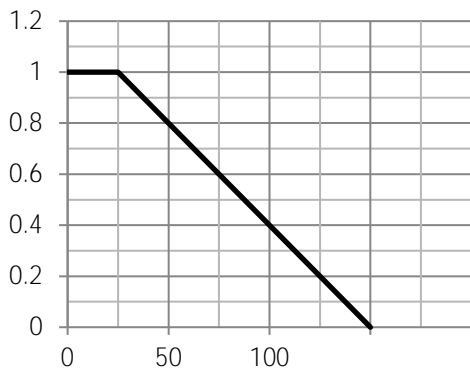


Fig.4 Typical output Characteristics

Fig.5 Threshold Voltage V.S Junction Temperature

Fig.6 Resistance V.S Drain Current



Fig.7 On-Resistance VS Gate Source Voltage

Fig.8 On-Resistance V.S Junction Temperature

Fig.9 SOA Maximum Safe Operating Area

Fig.10 ID-Junction Temperature

Fig.11 Switching Time Measurement Circuit



Fig.13 Switching Time Measurement Circuit

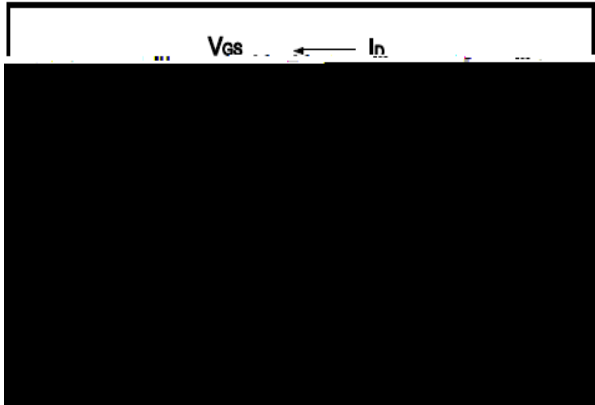


Fig.14 Gate Charge Waveform

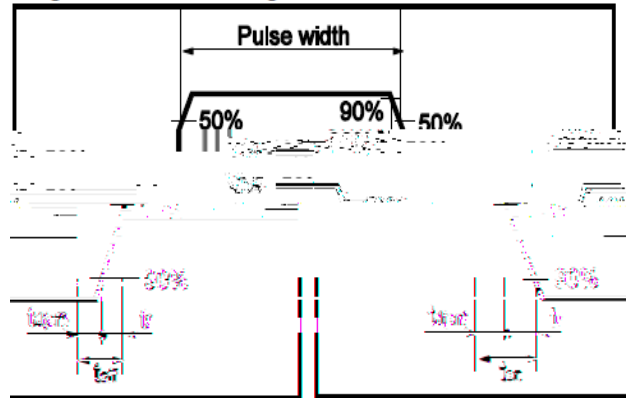


Fig.15 Avalanche Measurement Circuit

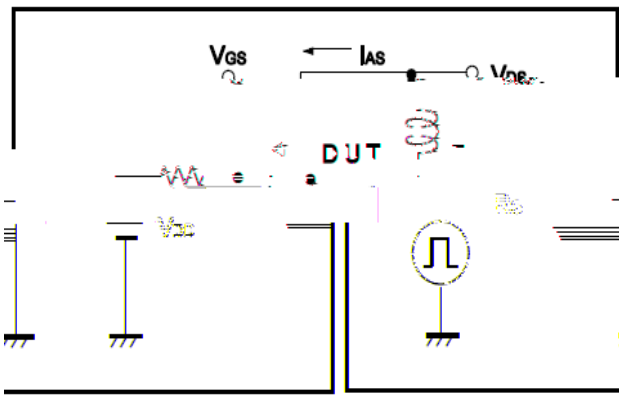


Fig.16 Avalanche Waveform

