



$T_C = 25$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	40	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_{D@TC=25^\circ C}$	100	A
	$I_{D@TC=75^\circ C}$	76	A
	$I_{D@TC=100^\circ C}$	63	A
Pulsed Drain Current ^①	I_{DM}	300	A
Total Power			

Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	1.1	$^{\circ}C/W$
Thermal resistance, junction - ambient	R_{thJA}	-	-	60	$^{\circ}C/W$
Soldering temperature, wave soldering for 10s	T_{sold}	-	-	265	$^{\circ}C$

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS} = 0V, I_D = 250\mu A$	40			V
Gate Threshold Voltage	$V_{GS(TH)}$	$V_{GS} = V_{DS}, I_D = 250\mu A$	1.2		2.5	V
Drain-Source Leakage Current	I_{DSS}	$V_{DS} = 40V, V_{GS} = 0V$			1.0	μA
Gate- Source Leakage Current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0V$			± 100	nA
Static Drain-source On Resistance		$V_{GS} = 10V, I_D = 24A$		3.1	4	$m\Omega$
		$V_{GS} = 4.5V, I_D = 12A$		4.5	5.8	$m\Omega$
Forward Trans conductance	g_{FS}	$V_{DS} = 25V, I_D = 10A$		16		S
Source-drain voltage	V_{SD}	$I_S = 24A$			1.28	V

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Input capacitance	C_{iss}	$f = 1MHz$				



Fig.1 Power Dissipation

Fig.2 Typical output Characteristics

Fig.3 Threshold Voltage V.S Junction Temperature Fig.4 Resistance V.S Drain Current

Fig.7 Switching Time Measurement Circuit

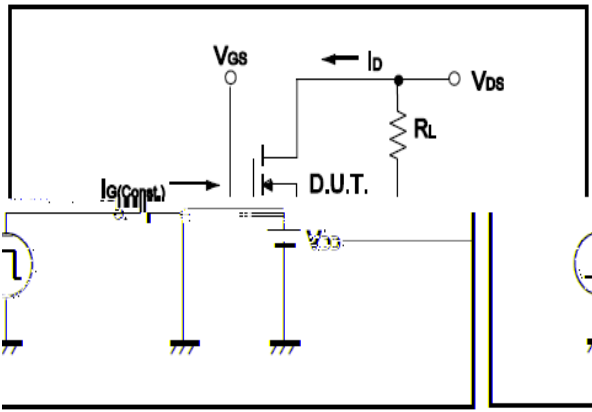


Fig.8 Gate Charge Waveform

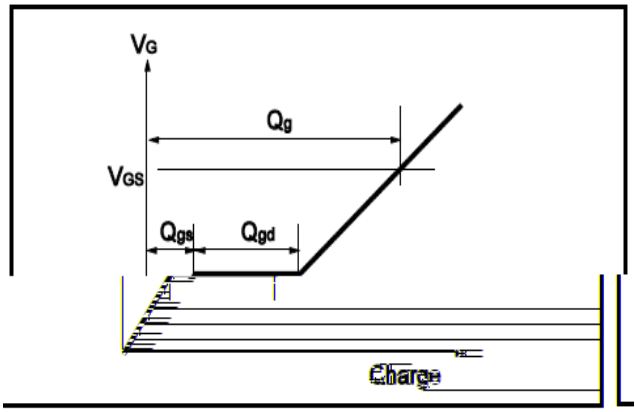


Fig.9 Switching Time Measurement Circuit

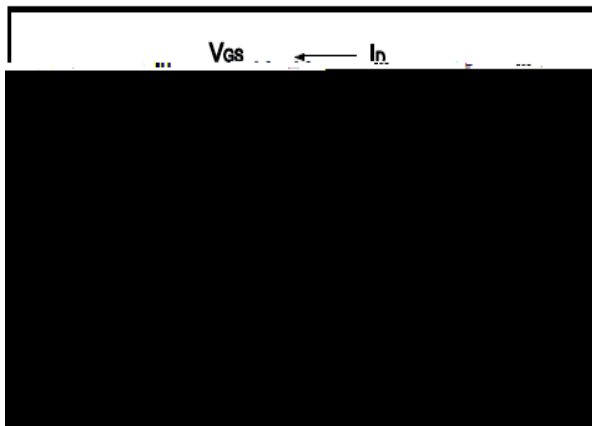


Fig.10 Gate Charge Waveform

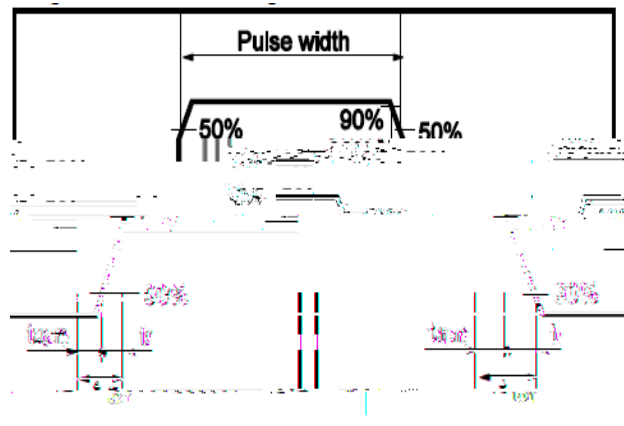


Fig.11 Avalanche Measurement Circuit

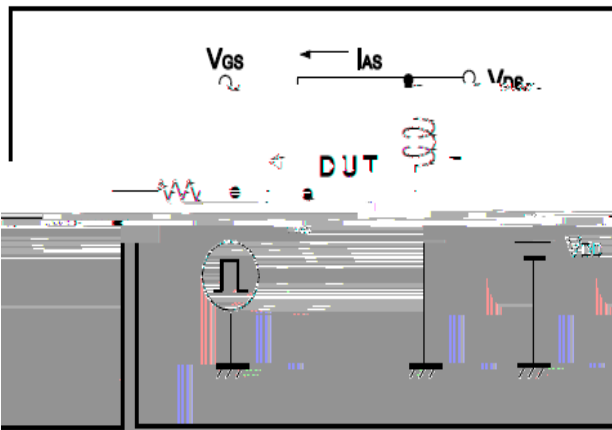


Fig.12 Avalanche Waveform

