
Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R _{thJC}	-	-	40	° C/W
Thermal resistance, junction - ambient	R _{thJA}	-	-	170	° 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 =250uA	80			V
Gate Threshold Voltage	V _{GS(TH)}	V _{GS} =V _{DS} , I _D =250uA	1.2		2.5	V
Drain-Source Leakage Current	I _{DSS}	V _{DS} =80V, V _{GS} =0V			1.0	uA
Gate- Source Leakage Current	I _{GSS}	V _{GS} =±20V, V _{DS} =0V			100	nA
Static Drain-source On Resistance		V _{GS} =10V, I _D =6A				
		V _{GS} =4.5V, I _D =4A				
Forward Transconductance	g _{FS}	V _{DS} =25V, I _D =5A				
Source-drain voltage	V _{SD}	I _S =6A				

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	C _{iss}	f = 1MHz	-	4200	-	pF
Output capacitance	C _{oss}		-	184	-	
Reverse transfer capacitance	C _{rss}		-	150	-	

Gate Charge characteristics(T_a = 25)

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Total gate charge	Q _g	V _{DD} = 25V I _D = 4A V _{GS} = 10V	-	85	-	nC
Gate - Source charge	Q _{gs}		-	18	-	
Gate - Drain charge	Q _{gd}		-	15	-	

Note: Pulse Test : ;



Fig.7 Switching Time Measurement Circuit

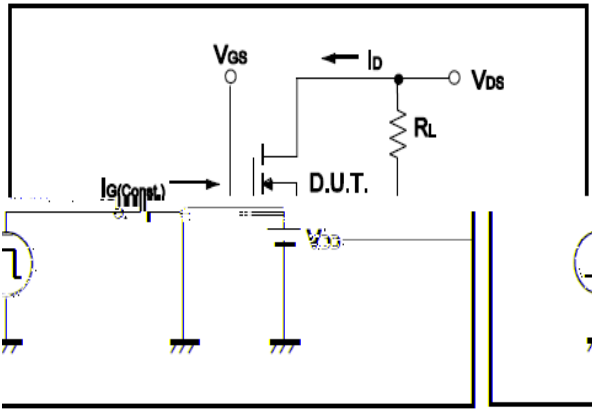


Fig.8 Gate Charge Waveform

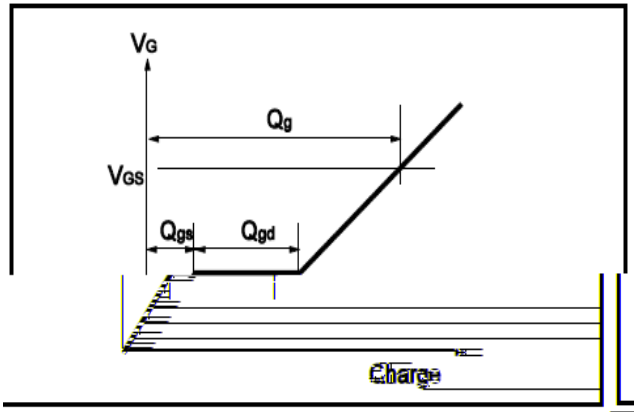


Fig.9 Switching Time Measurement Circuit

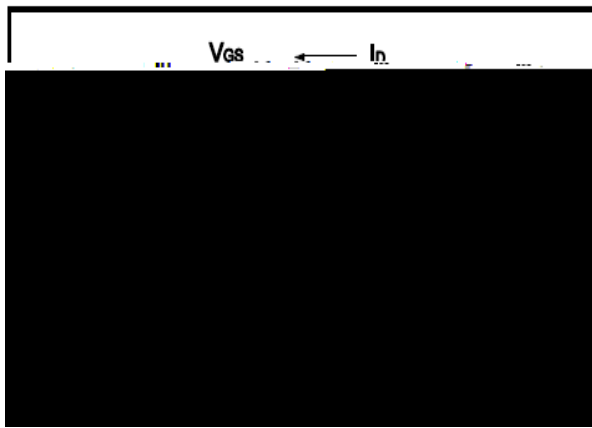


Fig.10 Gate Charge Waveform

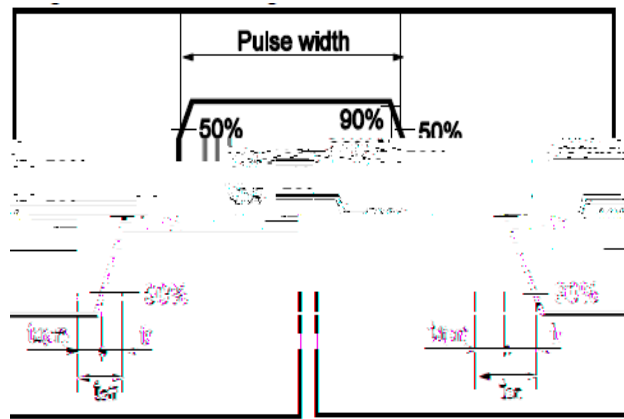


Fig.11 Avalanche Measurement Circuit

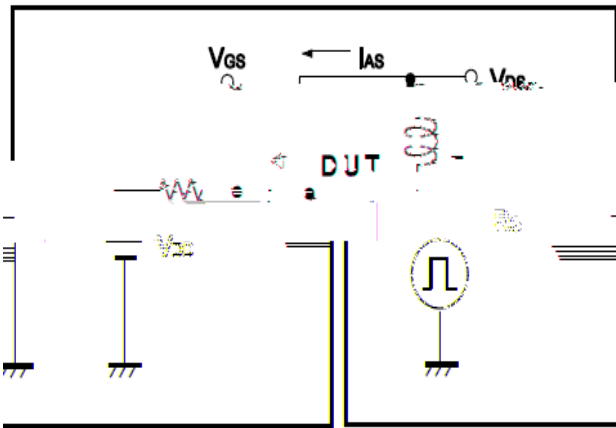
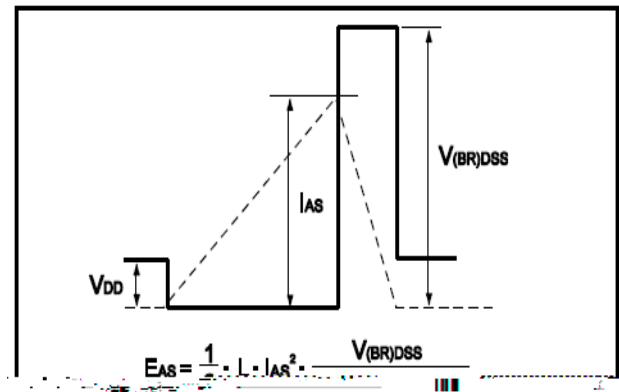


Fig.12 Avalanche Waveform



(SOP8)

Unit: mm

SYMBOL	min	TYP	max	SYMBOL	min		max
A	4.80		5.25	C	1.30		1.75
A1	0.37		0.49	C1	0.55		0.75
A2		1.27		C2	0.55		0.65
A3		0.41		C3	0.05		0.20
B	5.80		6.20	C4	0.10	0.20	0.23
B1	3.80		4.10	D		1.05	
B2		5.00		D1	0.40		0.62