



**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	2.1	$^{\circ}C/W$
Thermal resistance, junction - ambient	R_{thJA}	-	-	62.5	$^{\circ}C/W$
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	$^{\circ}C$

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_D=250\mu A$	80			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}	$V_{DS}=80V, V_{GS}=0V$			1.0	μA
Gate- Source Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0V$			± 100	nA
Static Drain-source On Resistance		$V_{GS}=10V, I_D=12A$		48	60	m
		$V_{GS}=4.5V, I_D=8A$		52	70	m
Source-drain voltage	V_{SD}	$I_S=12A$			1.28	V

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	C_{iss}	f = 1MHz	-	1560	-	pF
Output capacitance	C_{oss}		-	105	-	
Reverse transfer capacitance	C_{rss}		-	84	-	

Gate Charge characteristics($T_a = 25$)

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Total gate charge	Q_g	$V_{DD}=25V$	-	26	-	nC
Gate - Source charge	Q_{gs}	$I_D=6A$	-	5.9	-	
Gate - Drain charge	Q_{gd}	$V_{GS}=10V$	-	5.6	-	

Note:

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Fig.7 Switching Time Measurement Circuit

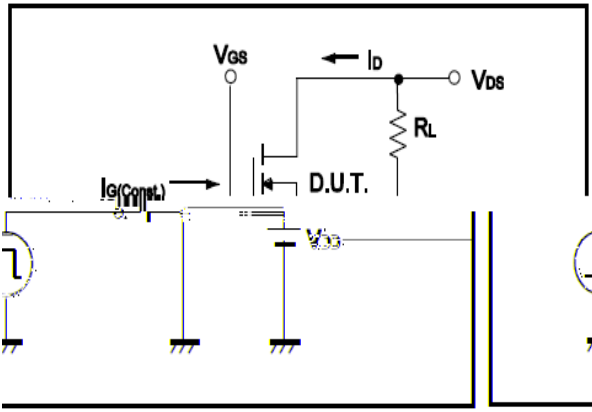


Fig.8 Gate Charge Waveform

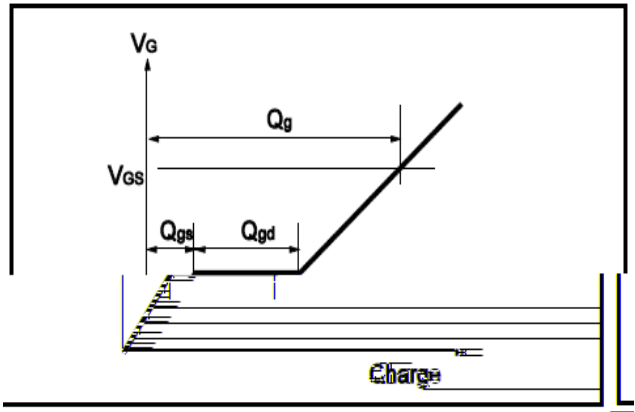


Fig.9 Switching Time Measurement Circuit

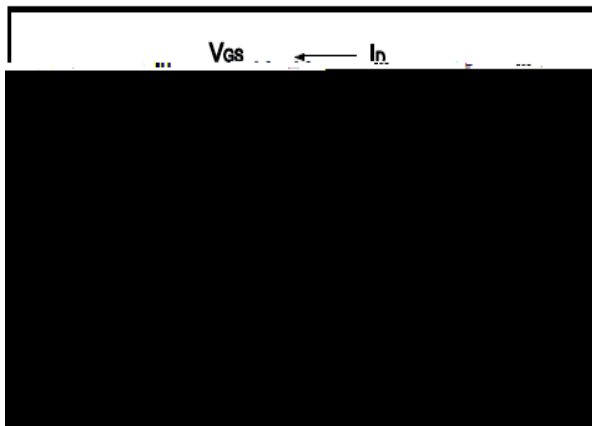


Fig.10 Gate Charge Waveform

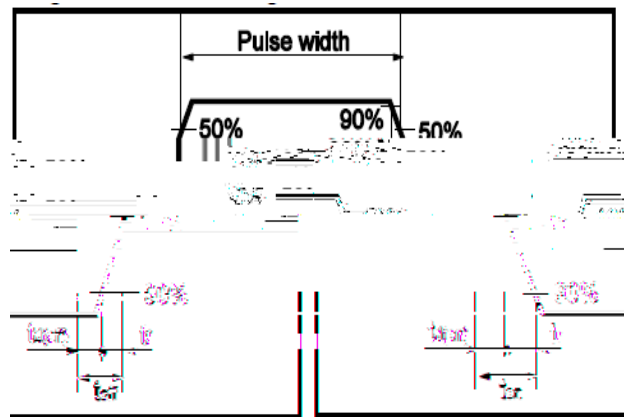


Fig.11 Avalanche Measurement Circuit

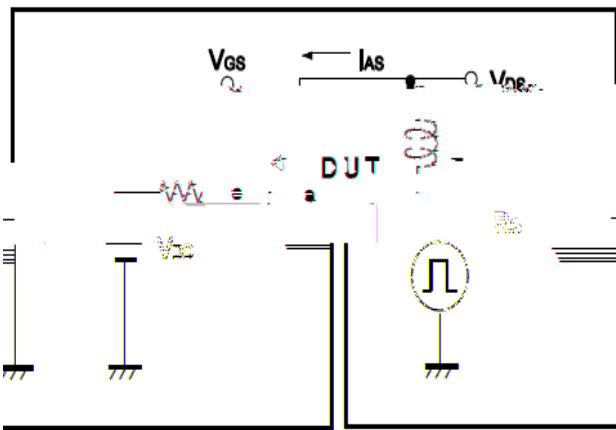
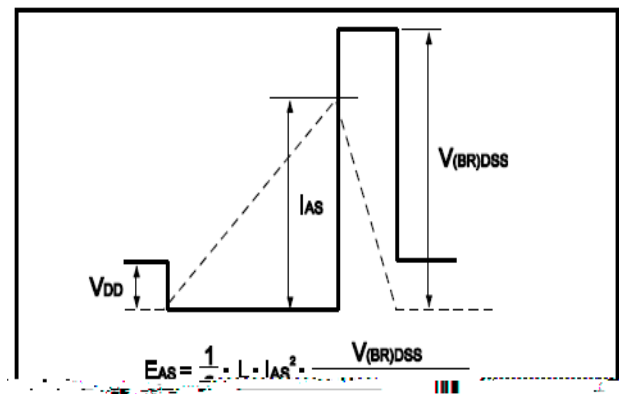


Fig.12 Avalanche Waveform





Unit mm

SYMBOL	min	max	SYMBOL	min	max
A	2.10	2.50	B	0.85	1.25
b	0.50	0.80	b1	0.50	0.90
b2	0.45	0.70	C	0.45	0.70
D	6.30	6.75	D1	5.10	5.50
E	5.30	6.30	e1	2.25	2.35
L1	9.20	10.60	e2	4.45	4.75
L2	0.90	1.75	L3	0.60	1.10
K	0.00	0.23			

