



[Redacted]

**T<sub>C</sub> =25**

Parameter	Symbol	Rating	Unit
Drain-			

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	$R_{thJC}$	-	-	2.5	$^{\circ}C/W$
Thermal resistance, junction - ambient	$R_{thJA}$	-	-	50	$^{\circ}C/W$
Soldering temperature, wavesoldering for 10s	$T_{sold}$	-	-	265	$^{\circ}C$

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	150			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	$I_{DSS}$	$V_{DS} = 150V, V_{GS} = 0V$			1.0	$\mu A$
Gate- Source Leakage Current	$I_{GSS}$	$V_{GS} = \pm 20V, V_{DS} = 0V$			$\pm 100$	nA
Static Drain-source On Resistance		$V_{GS} = 10V, I_D = 20A$		28	40	m $\Omega$
Forward Transconductance	$g_{FS}$	$V_{DS} = 10V, I_D = 20A$		7		s

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	$C_{iss}$	f = 1MHz	-	3400	-	pF
Output capacitance	$C_{oss}$		-	169	-	
Reverse transfer capacitance	$C_{rss}$		-	98	-	

**Gate Charge characteristics ( $T_a = 25^{\circ}C$ )**

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Total gate charge	$Q_g$	$V_{DD} = 25V$	-	57	-	nC
Gate - Source charge	$Q_{gs}$	$I_D = 8A$	-	12	-	
Gate - Drain charge	$Q_{gd}$	$V_{GS} = 10V$	-	11	-	

Note: ① Pulse Test :

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Fig.7 Switching Time Measurement Circuit

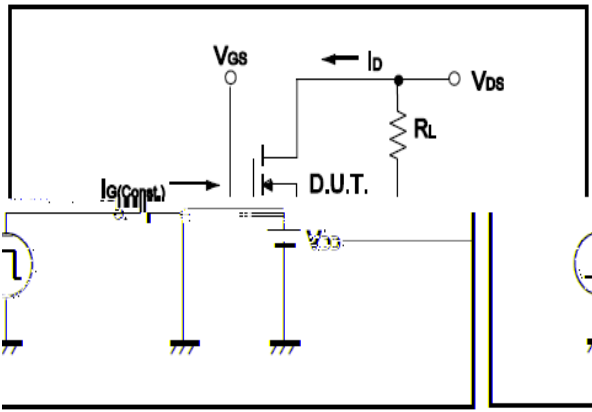


Fig.8 Gate Charge Waveform

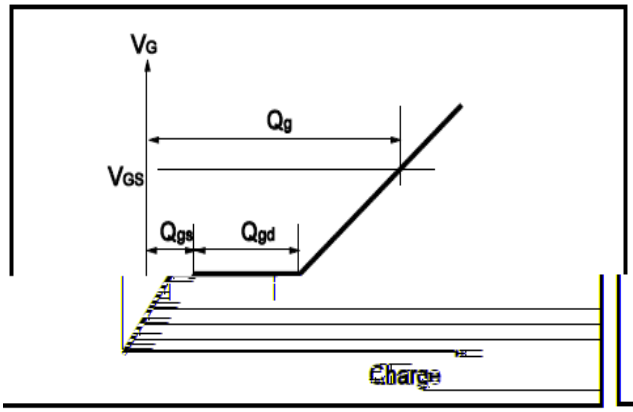


Fig.9 Switching Time Measurement Circuit

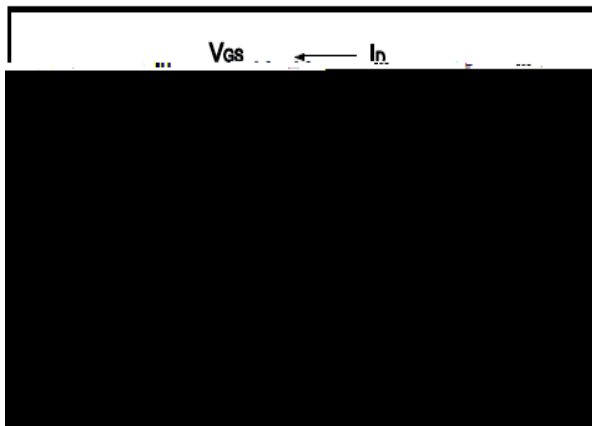


Fig.10 Gate Charge Waveform

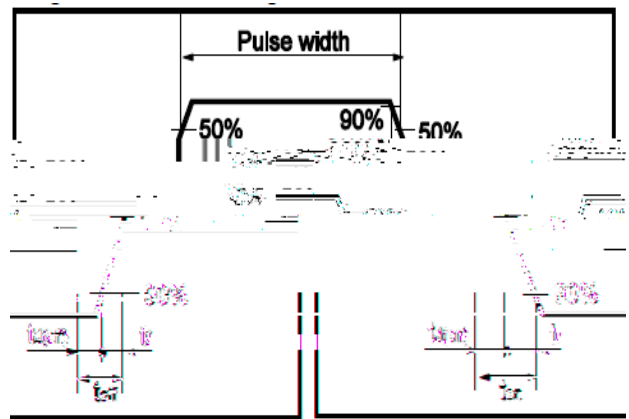


Fig.11 Avalanche Measurement Circuit

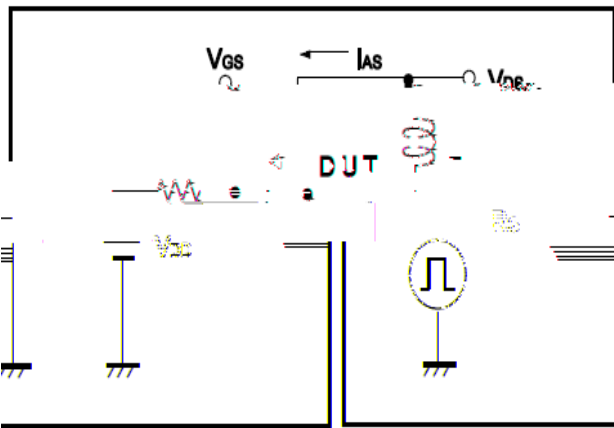
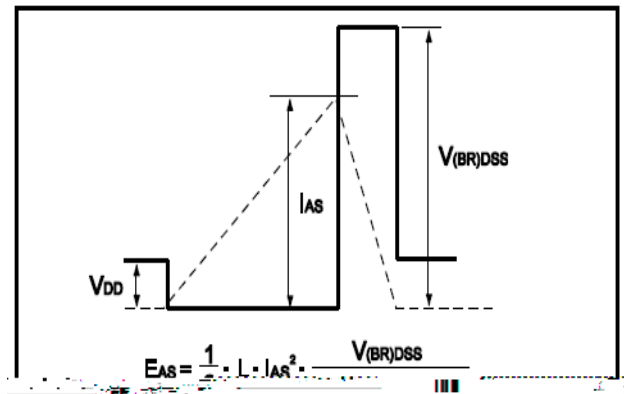


Fig.12 Avalanche Waveform





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			

