



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V <sub>DS</sub>	-40	V
Gate-Source Voltage	V <sub>GS</sub>	±20	V
Continuous Drain Current	I <sub>D@TC=25</sub>	-5.8	A
	I <sub>D@TC=75</sub>	-4.4	A
	I <sub>D@TC=100</sub>	-3.7	A
Pulsed Drain Current	I <sub>DM</sub>	-12	A
Total Power Dissipation	P <sub>D</sub>	1.5	W
Total Power Dissipation(TA=25 )	P <sub>D@TA=25</sub>	0.7	W

Operating Junction

**Thermal resistance**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	$R_{thJC}$	-	-	80	° C/W
Thermal resistance, junction - ambient	$R_{thJA}$	-	-	180	° C/W
Soldering temperature, wavesoldering for 10s	$T_{sold}$	-	-	265	° 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	$\mu A$
Gate- Source Leakage Current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0V$			100	



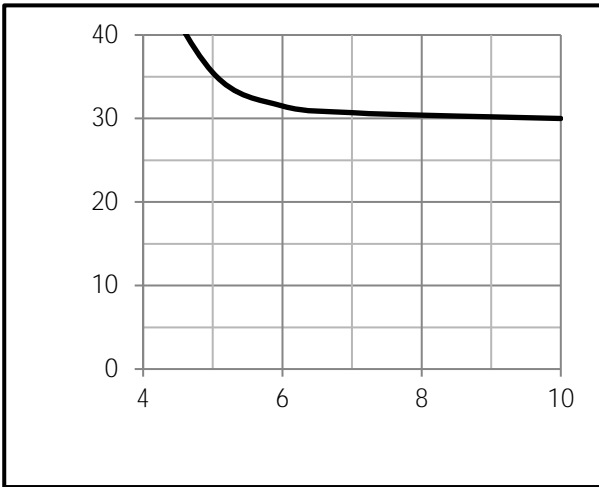


Fig.9 Switching Time Measurement Circuit

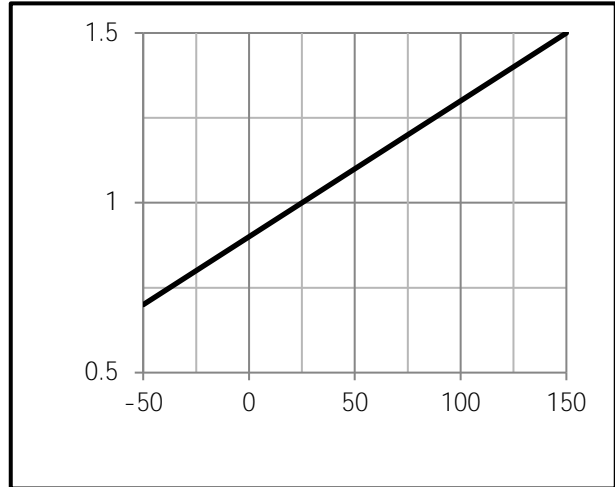


Fig.10 Gate Charge Waveform

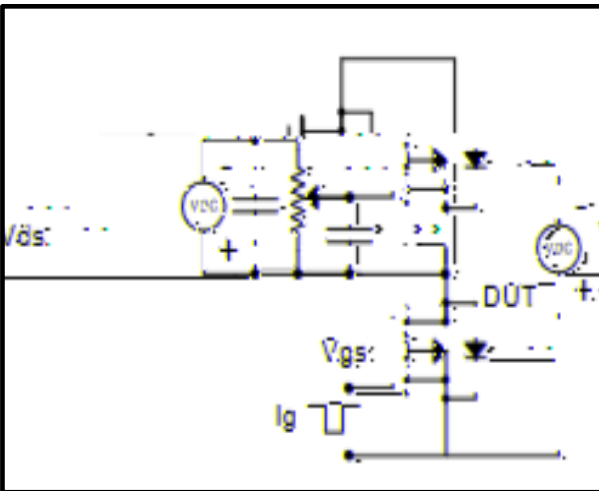


Fig.11 Switching Time Measurement Circuit

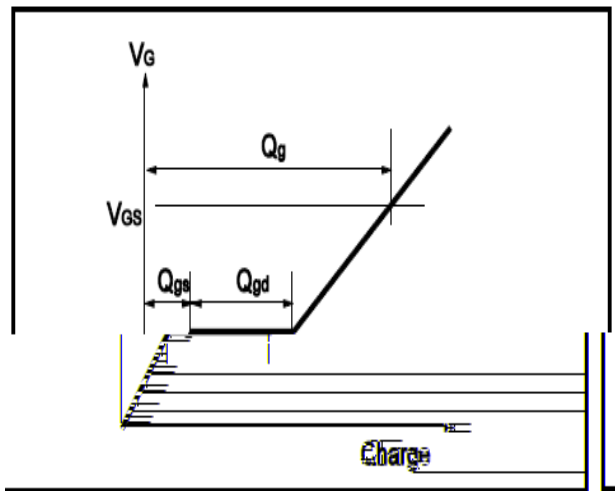
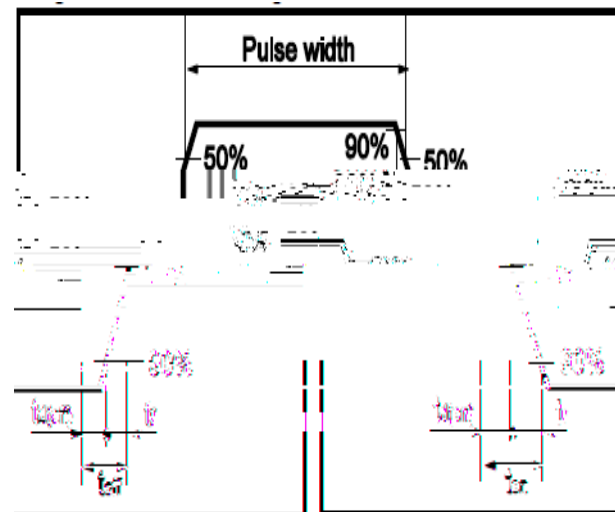
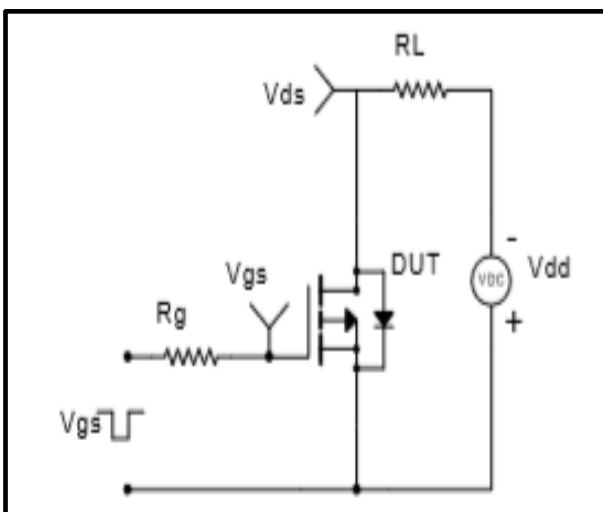


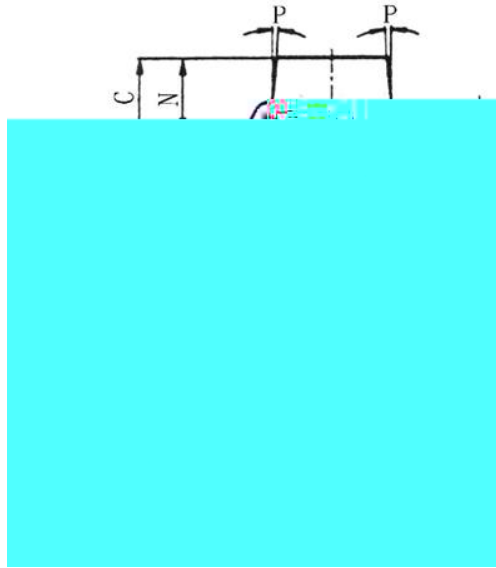
Fig.12 Gate Charge Waveform





(SOT23-3)

Unit mm



SYMBOL	min	nom	max
A	2.70	2.9	3.10
B	1.15	1.3	1.50
C			1.30
D	0.35	0.4	0.55
E	2.20	2.4	2.70
G	1.70	1.9	2.10
H	0.85	0.95	1.05
J	0.05	0.10	0.20
K	0.00		0.10
L	0.45	0.55	0.65
M	0.20		
N	0.90	1.00	1.20
P		7°	