

**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}	-5.8	A
	I _{D@TC=75}	-4.4	A
	I _{D@TC=100}	-3.7	A
Pulsed Drain Current	I _{DM}	-12	A
Total Power Dissipation	P _D	1.5	W
Total Power Dissipation(TA=25)	P _{D@TA=25}	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	μA
Gate- Source Leakage Current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0V$			100	

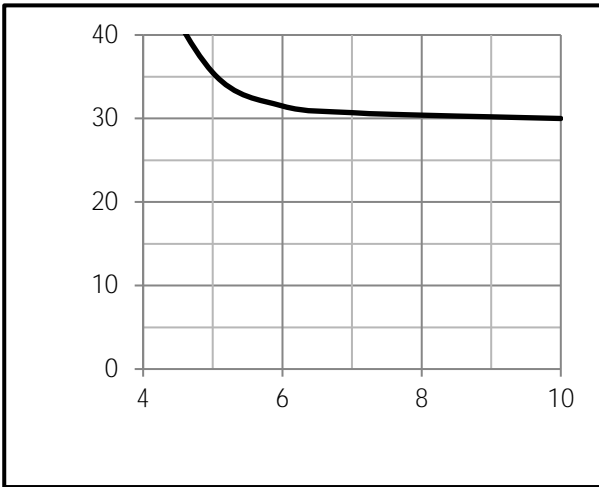


Fig.9 Switching Time Measurement Circuit

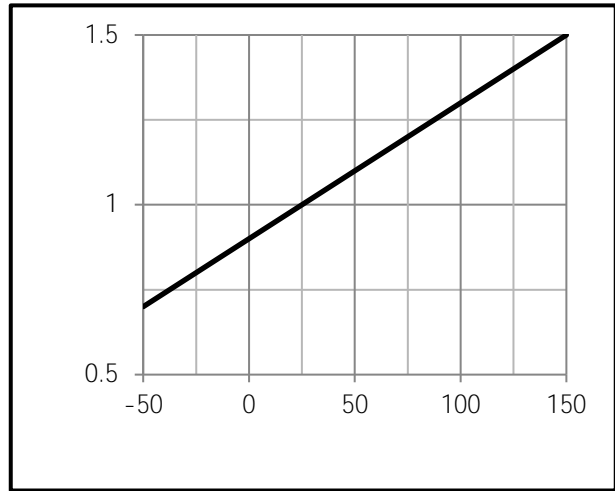


Fig.10 Gate Charge Waveform

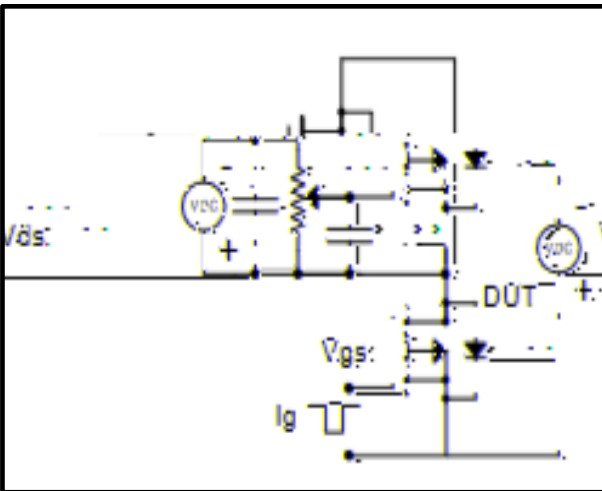


Fig.11 Switching Time Measurement Circuit

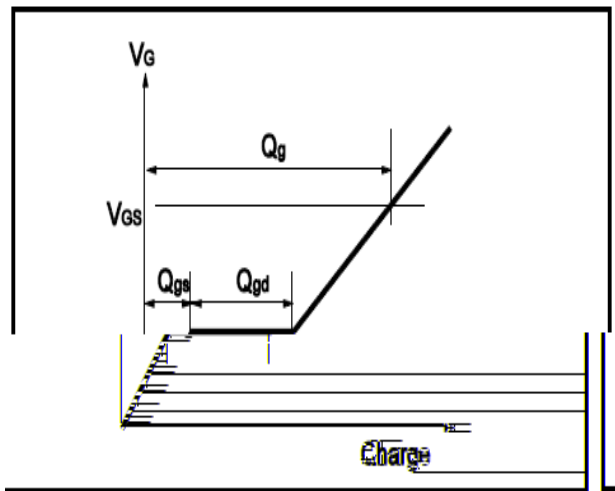
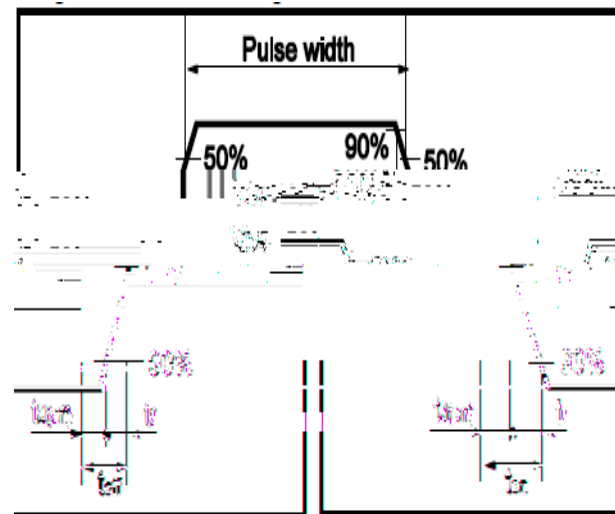
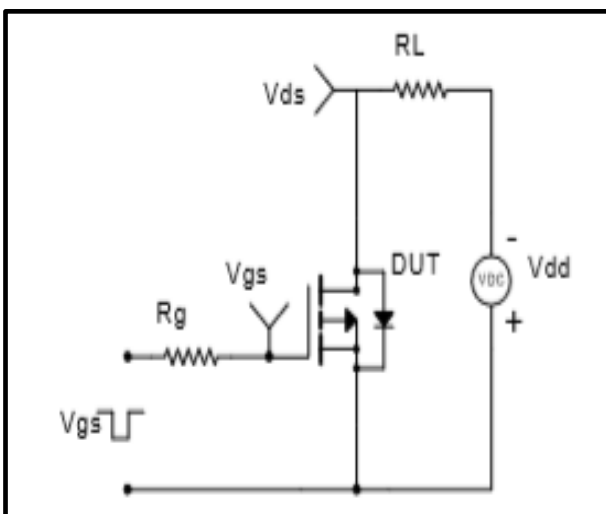


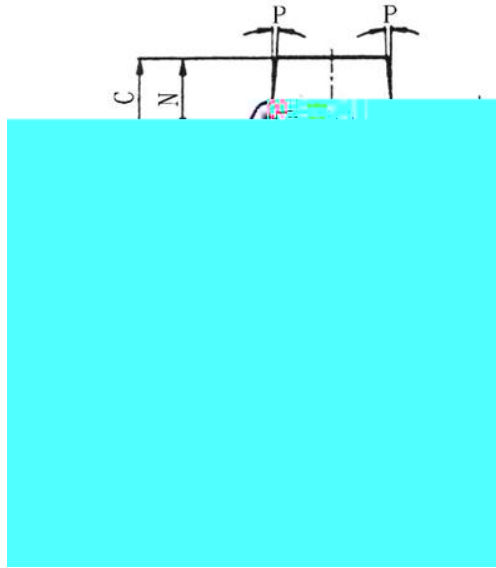
Fig.12 Gate Charge Waveform





(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°	