

Surface Mount High-Voltage Switching Diode

(Pb) Lead(Pb)-Free

Features:

- *Silicon Epitaxial Planer
- *High Reliability
- * $V_{RM}=250V$

Mechanical Data:

- *Case : MINI-MELF Glass Case (SOD-80)
- *Weight : Approx 0.05 gram

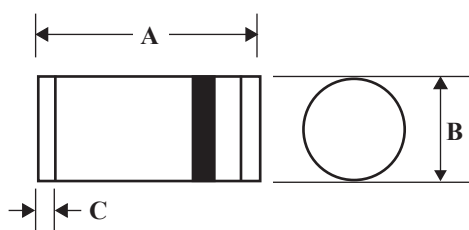
SWITCHING DIODES
200 m AMPERES
250 VOLTS



MINI-MELF

MINI-MELF Outline Dimensions

Unit:mm



MINI MELF		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50

Maximum Ratings ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Characteristic	Symbol	RLS245	Unit
Peak Reverse Voltage	V_{RM}	250	V
DC Reverse Voltage	V_R	220	V
Mean Rectifying Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ $t=1s$	I_{FSM}	1	A
Power Dissipation	P_d	300	mW
Thermal Resistance Junction to Ambient(1)	$R_{\theta JA}$	500	K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	$^{\circ}\text{C}$

Note:

1. Part Mounted on 50mm×50mm×1.6mm PC Board.

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage $I_F=200\text{ mA}$	V_F	-	1.13	1.5	V
Reverse Current $V_R=220\text{V}$	I_R	-	0.05	10	μA
Diode Capacitance $V_R=0, f=1\text{MHz}$	C_D	-	-	3	PF
Reverse Recovery Time $I_F=I_R=20\text{mA}, R_L=50\ \Omega$	T_{rr}	-	-	75	nS

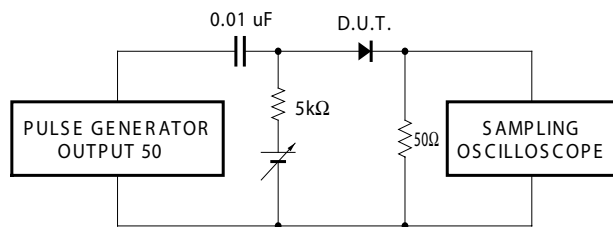


FIG.1 Reverse Recovery Time (t_{rr}) Measurement Circuit

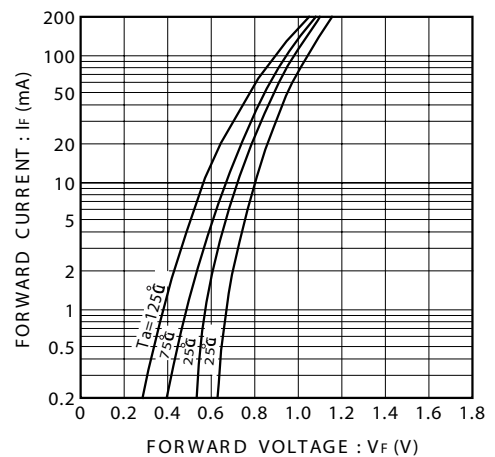


FIG. 2 Forward Characteristics

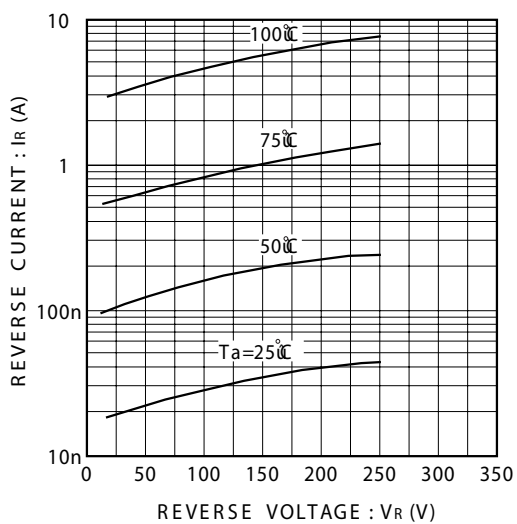


FIG. 3 Reverse Characteristics

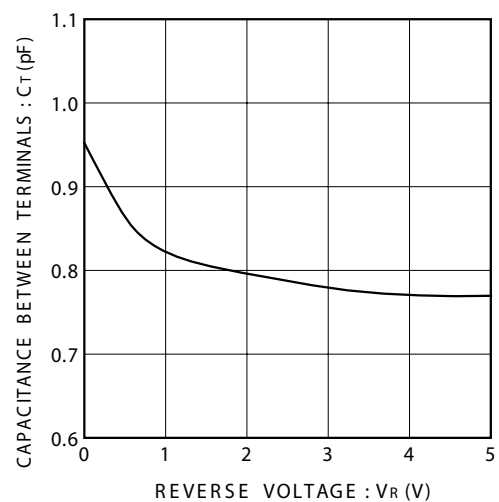


FIG. 4 Capacitance Between Terminals Characteristics

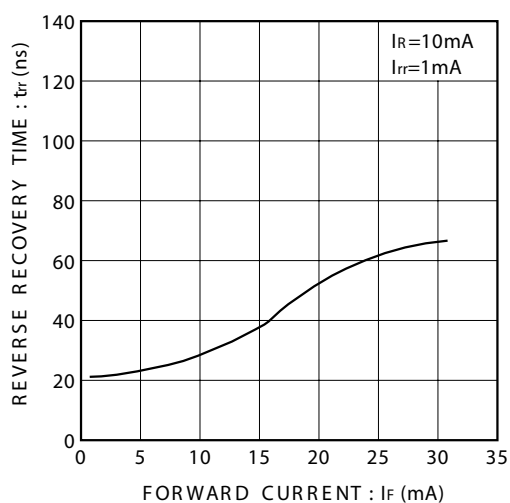


FIG. 5 Reverse Recovery Time Characteristics

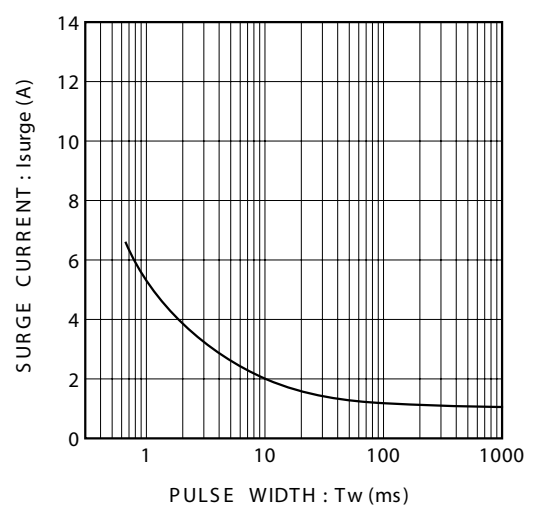


FIG.6 Surge Current Characteristics