

### Surface Mount High-Voltage Switching Diode

 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

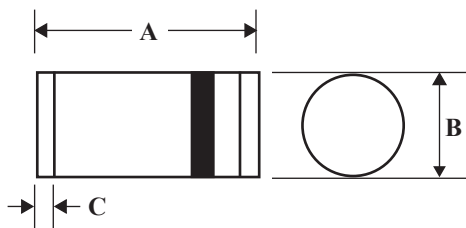
**SWITCHING DIODES**  
**200 m AMPERES**  
**250 VOLTS**



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

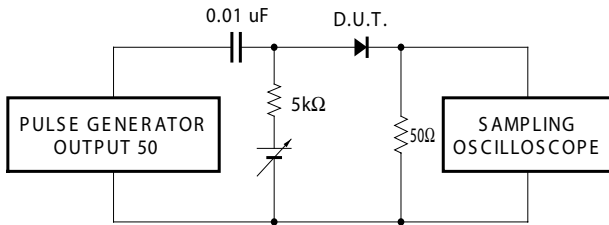
Characteristic	Symbol	RLS245	Unit
Peak Reverse Voltage	$V_{RM}$	250	V
DC Reverse Voltage	$V_R$	220	V
Mean Rectifying Current	$I_o$	200	mA
Non-Repetitive Peak Forward Surge Current @ $t=1s$	$I_{FSM}$	1	A
Power Dissipation	$P_d$	300	mW
Thermal Resistance Junction to Ambient(1)	$R_{\theta JA}$	500	K/W
Operating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

Note:

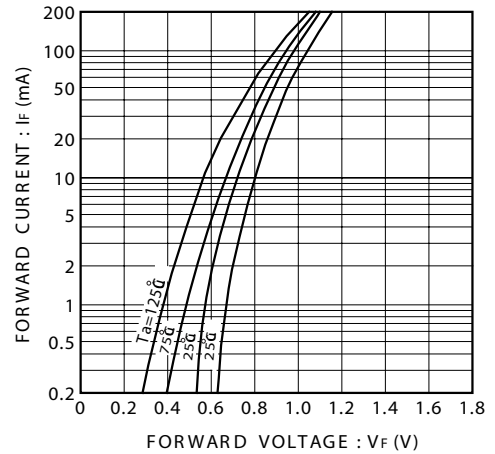
1. Part Mounted on 50mm×50mm×1.6mm PC Board.

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

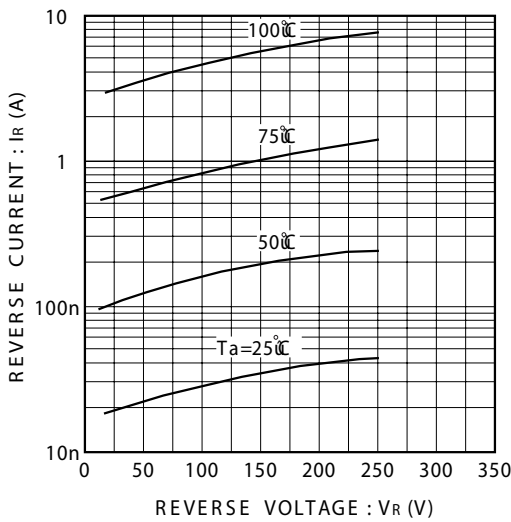
Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage $I_F=200\text{ mA}$	$V_F$	-	1.13	1.5	V
Reverse Current $V_R=220V$	$I_R$	-	0.05	10	$\mu\text{A}$
Diode Capacitance $V_R=0, f=1\text{ MHz}$	$C_D$	-	-	3	PF
Reverse Recovery Time $I_F=I_R=20\text{ mA}, R_L=50\ \Omega$	$T_{rr}$	-	-	75	nS



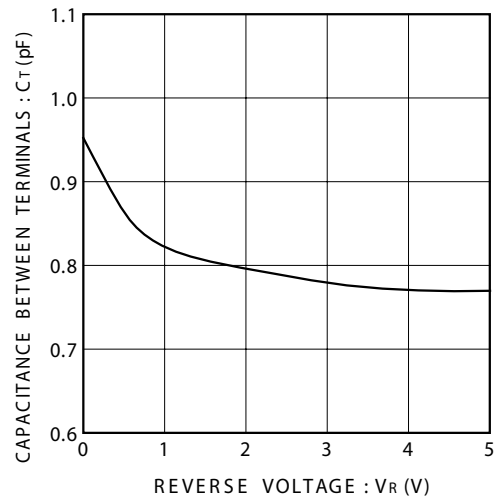
**FIG.1 Reverse Recovery Time ( $t_{rr}$ ) Measurement Circuit**



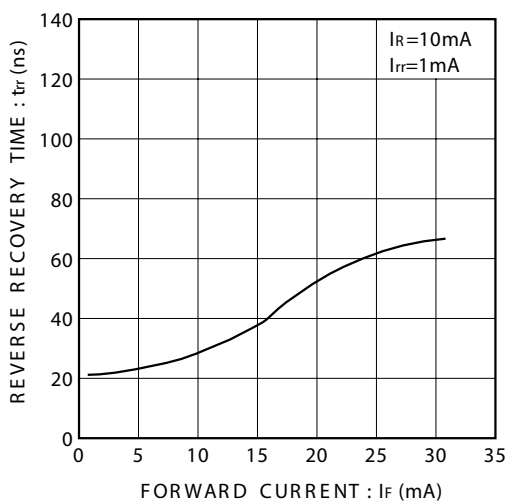
**FIG. 2 Forward Characteristics**



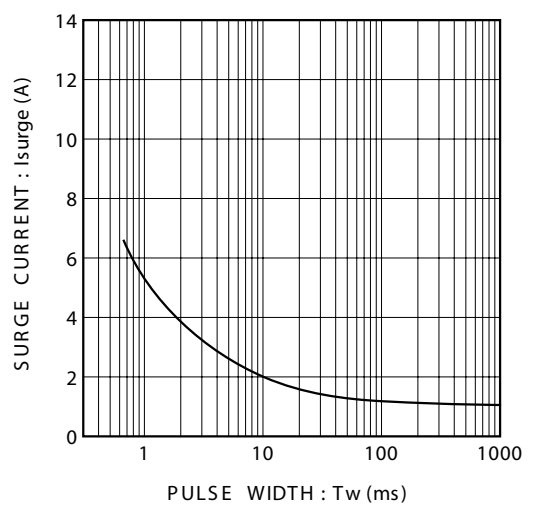
**FIG. 3 Reverse Characteristics**



**FIG. 4 Capacitance Between Terminals Characteristics**



**FIG. 5 Reverse Recovery Time Characteristics**



**FIG.6 Surge Current Characteristics**