

### Surface Mount Schottky Diodes

**(Pb)** Lead(Pb)-Free

#### Features:

- \*Low Forward Voltage
- \*Fast Switching
- \*Low Switching Noise
- \*Ideal for Surface Mounted Application

#### Mechanical Data:

- \*Case : MINI-MELF Plastic Case (SOD-80)
- \*Weight : Approx 0.15 gram

**SMALL SIGNAL  
SCHOTTKY DIODES  
1.0 AMPERES  
30 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 and Electrical Characteristics**

Rating 25°C Ambient Temperature Unless Otherwise Specified.

Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

Characteristics	Symbol	MM18L	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	30	V
Maximum RMS Voltage	VRMS	21	V
Maximum DC Blocking Voltage	VDC	30	V
Maximum Average Forward Rectified Current @TC=75°C	IF(AV)	1.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	10	A
Maximum Instantaneous At 1.0A DC	VF	0.50	V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=75°C	IR	0.5 10	mA
Typical Junction Capacitance (Note 1)	CJ	80	pF
Typical Thermal Resistance (Note 2)	RθJL	30	°C/W
Operating Temperature Range	TJ	-55 to+125	°C
Storage Temperature Range	TSTG	-55 to+150	°C

NOTES:1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.

2.Thermal Resistance Junction to case.

## RATING AND CHARACTERISTICS CURVE

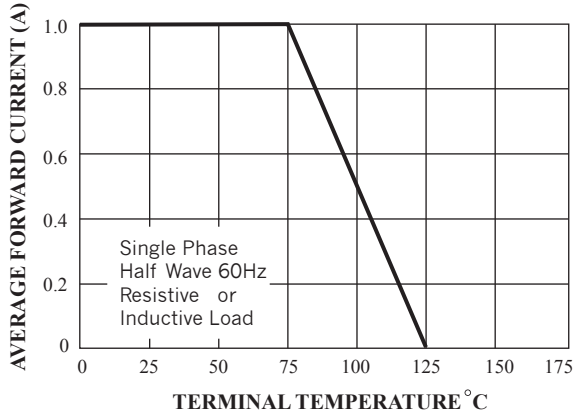


FIG 1, FORWARD CURRENT DERATING CURVE

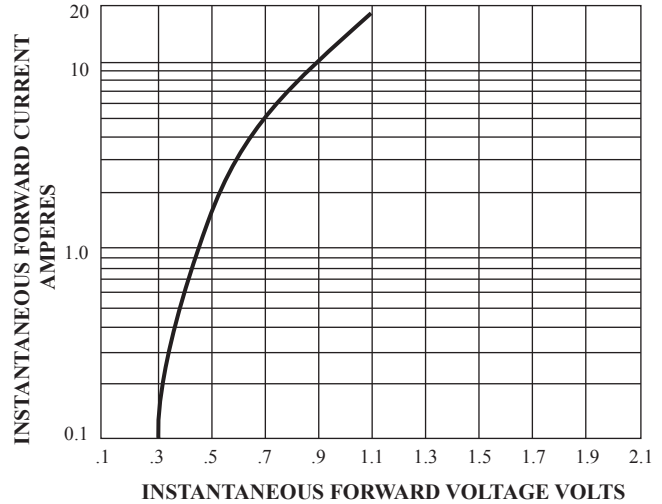


FIG 2, TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

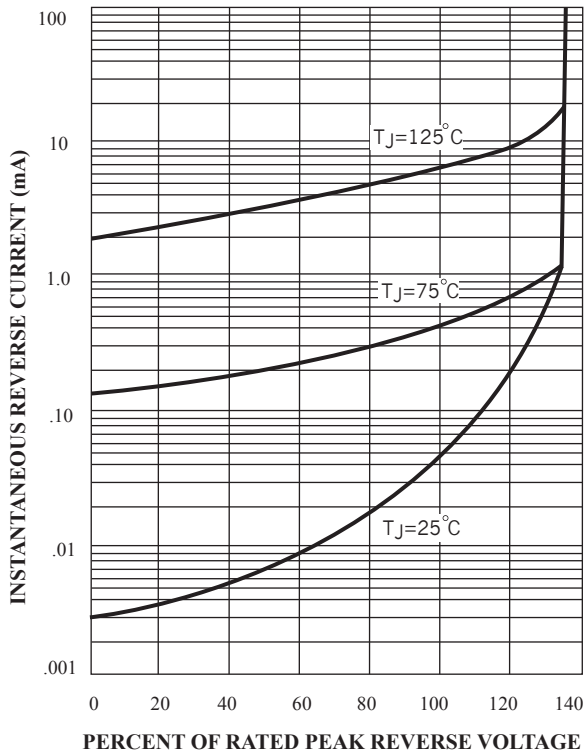


FIG 3, TYPICAL REVERSE CHARACTERISTICS

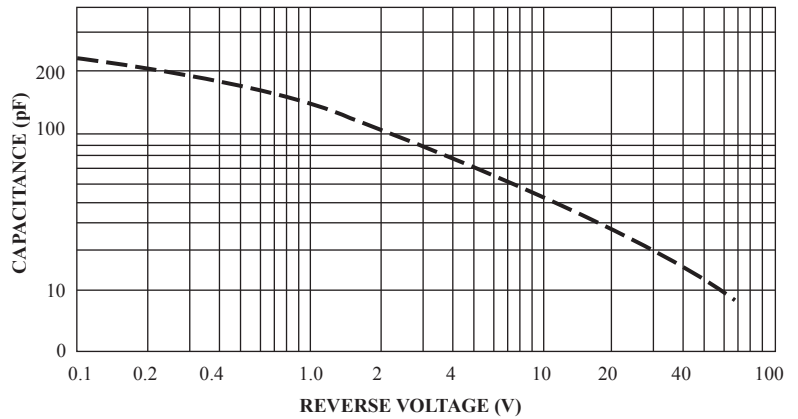


FIG 4, TYPICAL JUNCTION CAPACITANCE

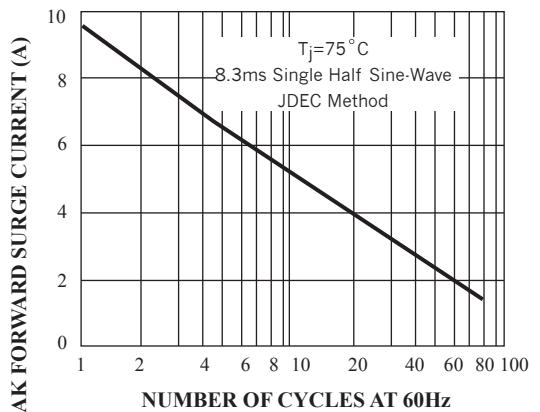


FIG 5, MAXIMUM NON-REPETITIVE SURGE CURRENT