

Surface Mount Schottky Diodes

(Pb) Lead(Pb)-Free

Features:

- * High current capability
- * High surge current capability
- * Low forward voltage drop
- * For use in low voltage, high frequency inverters free wheeling ,and polarity protection applications

Mechanical Data:

- * Case: MiniMELF, molded plastic body
- * Terminals: Solder plated, solderable per MIL-STD-750, method 2026
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any

**SMALL SIGNAL
SCHOTTKY DIODES
1.0 AMPERES
20-100 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	MM17	MM18	MM19	MM105	MM106	MM108	MM110	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	80	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length	IF (AV)	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	40							A
Maximum Instantaneous At 1.0A DC	VF	0.55		0.7		0.85		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	110							pF
Typical Thermal Resistance (Note 2)	RθJL	75							°C/W
Operating Temperature Range	TJ	-55 to+125			-55 to+150				°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 ambient 0.24" X 0.24"(6 X 6 mm) copper pads to each terminals

RATING AND CHARACTERISTICS CURVE

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

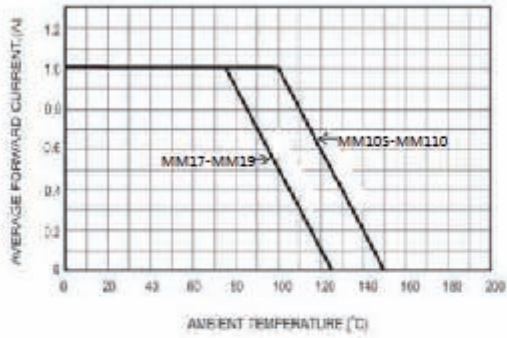


FIG.2-TYPICAL FORWARD CHARACTERISTICS

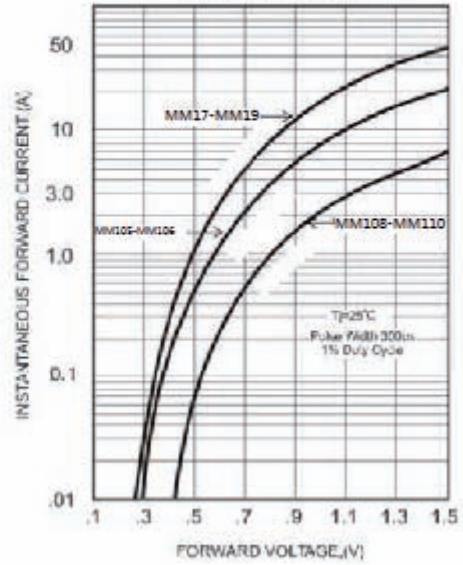


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

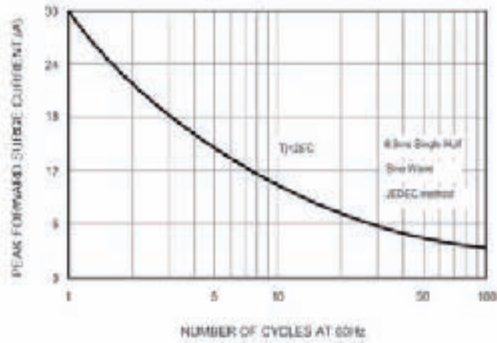


FIG.5-TYPICAL REVERSE CHARACTERISTICS

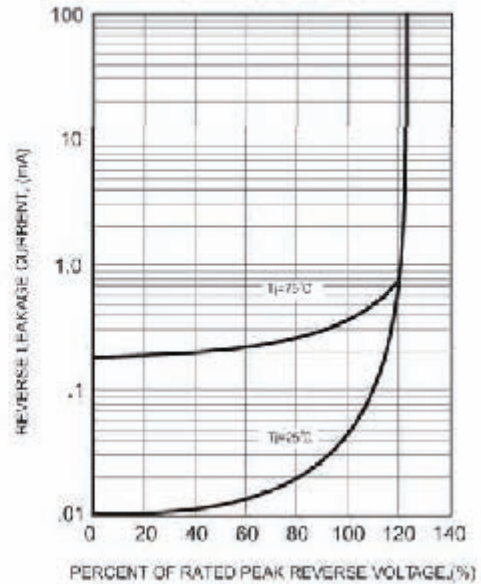


FIG.4-TYPICAL JUNCTION CAPACITANCE

