WEITRON

MM17 thru MM110

Surface Mount Schottky Diodes

Lead(Pb)-Free

SMALL SIGNAL
SCHOTTKY DIODES
1.0 AMPERES
20-100 VOLTS

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:

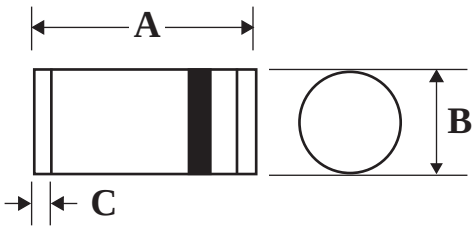
* Case: MiniMELF, molded plastic body
* Terminals: Solder plated, solderable per MIL-STD-750, method 2026
* Polarity: Color band denotes cathode end
* Mounting Position: Any



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	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	80	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	40							A
Maximum Instantaneous At 1.0A DC	V_F	0.55			0.7		0.85		V
Maximum DC Reverse Current @Tj=25 C° At Rated DC Blocking Voltage @Tj=75 C°	I_R	0.5 10							mA
Typical Junction Capacitance (Note 1)	C_J	110							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	75							°C/W
Operating Temperature Range	T_J	-55 to+125			-55 to+150				℃
Storage Temperature Range	T_{STG}	-55 to+150							℃

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

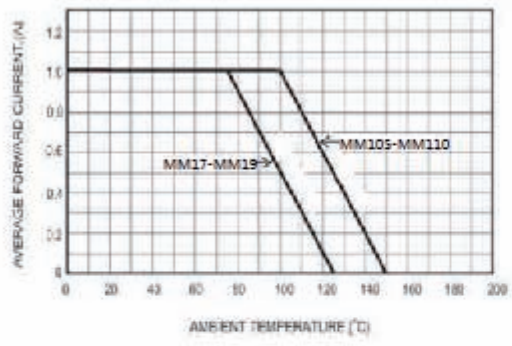


FIG.2-TYPICAL FORWARD CHARACTERISTICS

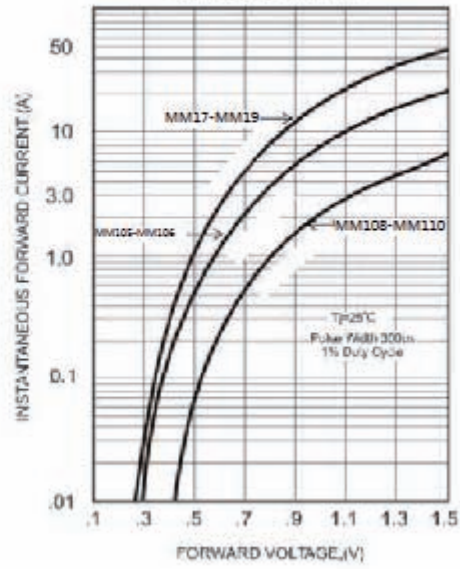


FIG.3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

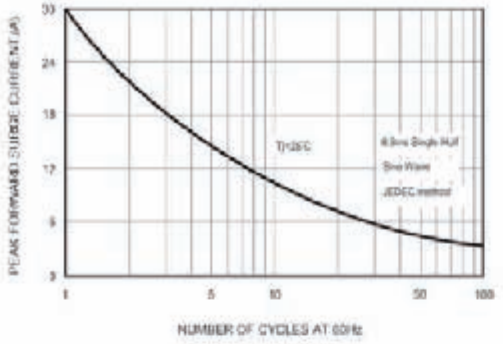


FIG.4-TYPICAL JUNCTION CAPACITANCE

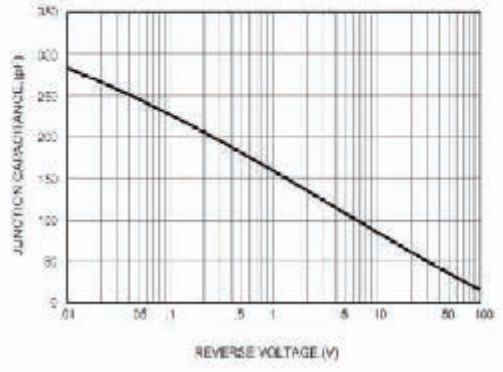


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

