

Surface Mount Schottky Diodes

 **Lead(Pb)-Free**

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Features:

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

Mechanical Data

- *Case : Molded Plastic
- *Polarity :Indicated by cathode band
- *Weight : 0.005 Ounce ,0.016 grams

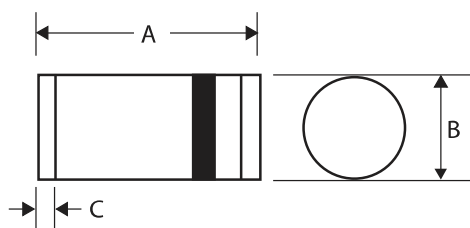
**SMALL SIGNAL
SCHOTTKY DIODES
1.0 AMPERES
20-60 VOLTS**



MELF

MELF Outline Dimensions

Unit:mm



MELF		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.67
C	0.46	0.60

Maximum Ratings and Electrical Characteristics

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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	M5817	M5818	M5819	M105	M106	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	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	30					A
Maximum Instantaneous At 1.0A DC	VF	0.50	0.55	0.60	0.7		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)	R θJL	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

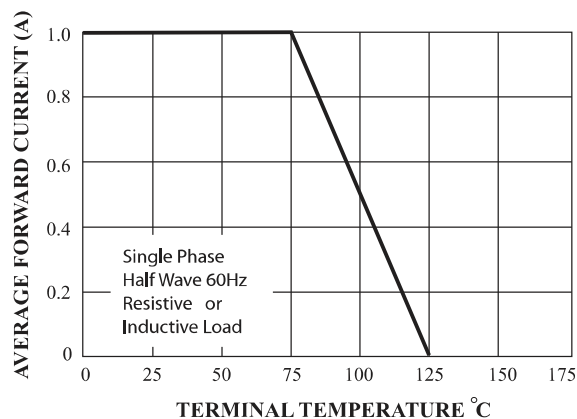


FIG.1 FORWARD CURRENT DERATING CURVE

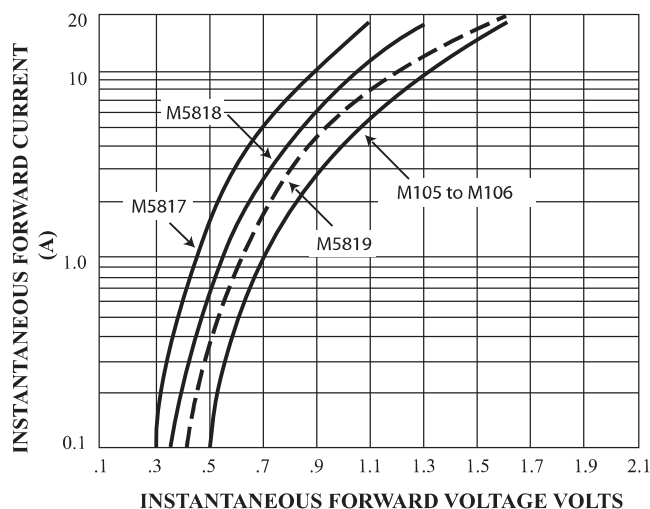


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

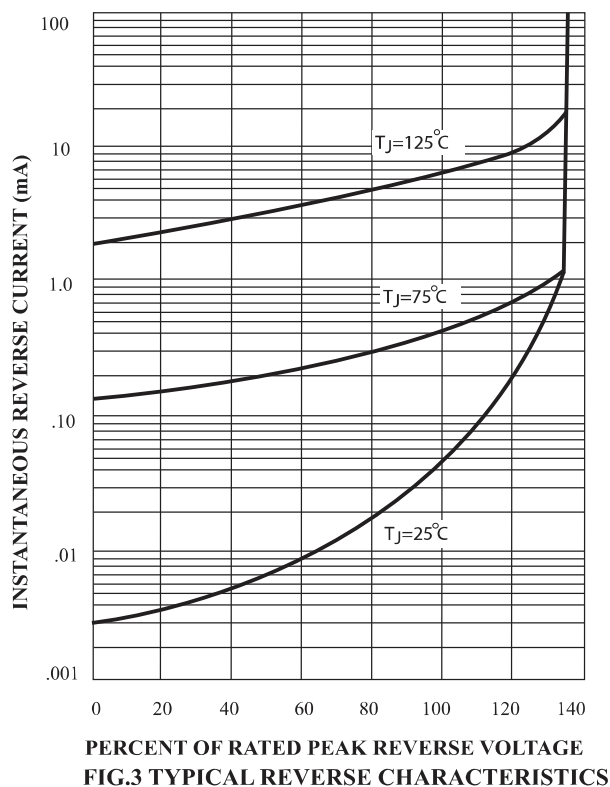


FIG.3 TYPICAL REVERSE CHARACTERISTICS

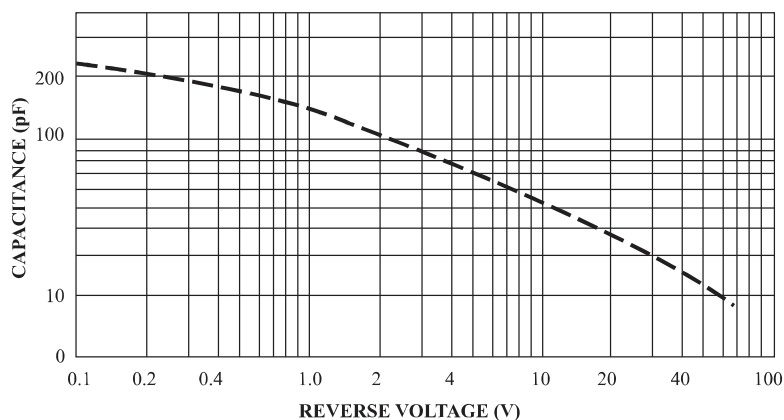


FIG.4 TYPICAL JUNCTION CAPACITANCE

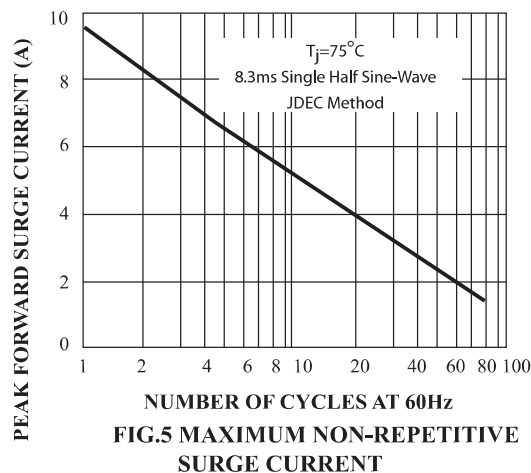


FIG.5 MAXIMUM NON-REPETITIVE SURGE CURRENT