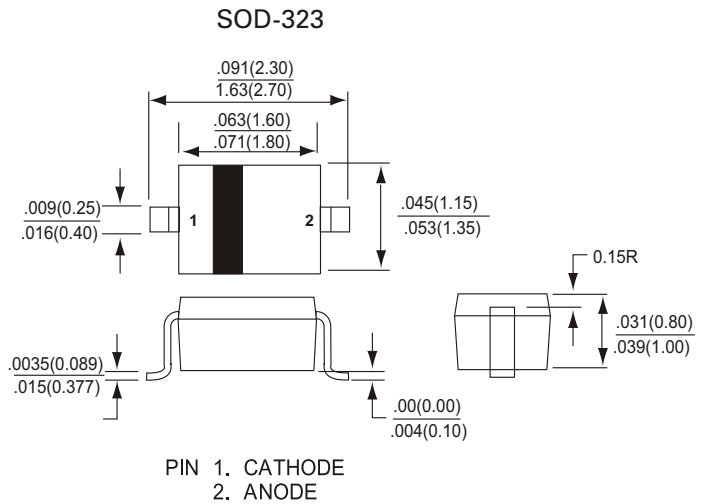


# SM5817WS thru SM5819WS

## 1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



### FEATURES

- High current capability
- Extreme low thermal Resistance
- For surface Mount Applications
- Low forward voltage
- High Temp soldering : 250°C/10 seconds At Terminals

### MECHANICAL DATA

Case : Molded plastic  
 Epoxy : UL 94V-0 rate flame retardant  
 Lead : Aiial leads, solderable per MIL-STD-202,  
 Method 208 guaranteed  
 Polarity : Color band denotes cathode end  
 Mounting position : Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified  
 Single phase, half sine wave, 60Hz, resistive or inductive load  
 For capacitive load, derate current by 20%

TYPE NUMBER	SM5817WS	SM5818WS	SM5819WS	UNITS
Maximum Repetitive Peak Reverse Voltage	20	30	40	Volts
Maximum RMS Voltage	14	21	28	Volts
Maximum DC Blocking Voltage	20	30	40	Volts
Maximum Average Forward Rectified Current see Fig. 1	1.0			Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	3			Amps
Maximum Instantaneous Forward Voltage at 1.0A	0.45	0.55	0.6	Volts
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	1.0 10			mA
Typical Junction Capacitance (NOTE 1)	110			pF
Typical Thermal Resistance $R_{JA}$ (NOTE 2)	426			°C / W
Operating Temperature Range $T_J$	-40 to +125			°C
Storage Temperature Range $T_{STG}$	-40 to +135			°C

#### NOTES :

1. Measured at 1.0MHz and applied reverse voltage of 5.0 volts
2. Thermal Resistance Junction to Case.

# SM5817WS thru SM5819WS

## 1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### RATINGS AND CHARACTERISTIC CURVES SM5817WS THRU SM5819WS

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

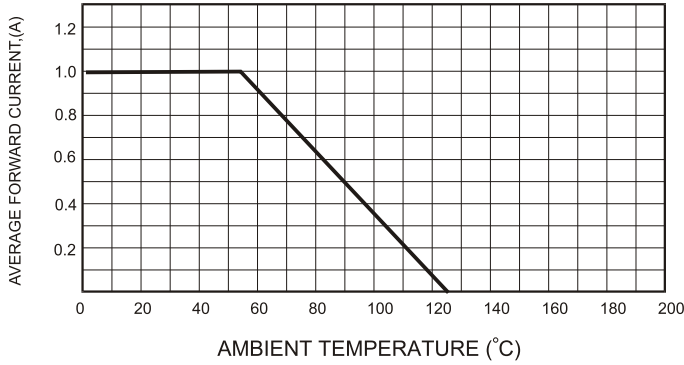


FIG.2-TYPICAL FORWARD CHARACTERISTICS

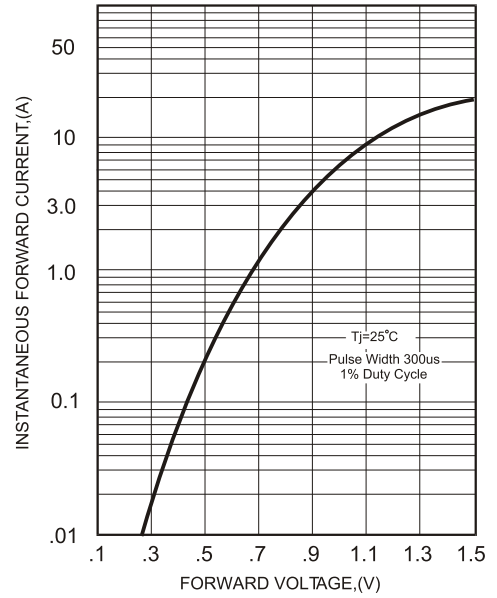


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

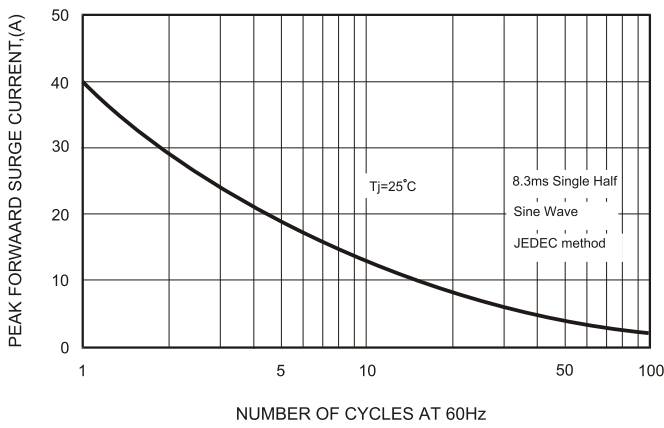


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

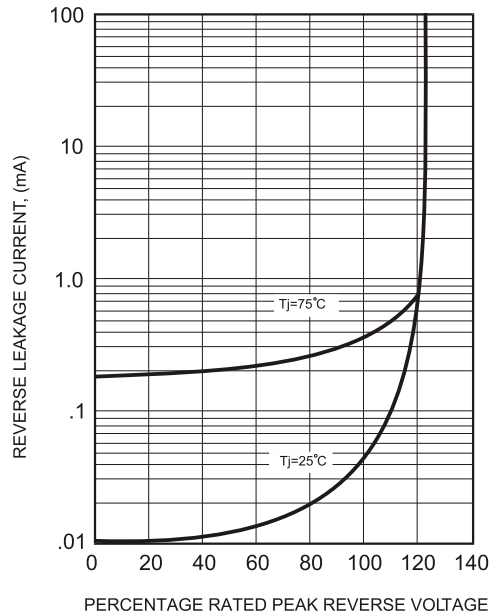


FIG.4-TYPICAL JUNCTION CAPACITANCE

