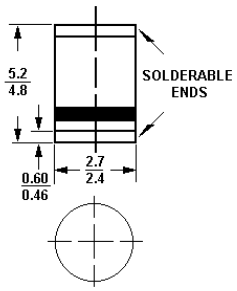
SM5817 THRU SM5819

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 20 to 40 V
Forward Current - 1 A

Features

- Fast switching
- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction



Plastic case MELF (DO-213AB)
Dimensions in millimeters

Mechanical data

- **Case:** MELF (DO-213AB) molded plastic
- **Mounting position:** Any

Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	SM5817	SM5818	SM5819	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current at T_A = 90 °C	$I_{F(AV)}$	1			A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage at 1 A DC	V_F	0.45	0.55	0.6	V
Maximum Instantaneous Forward Voltage at 3.1 A DC	V_F	0.75	0.875	0.9	V
Maximum Average Reverse Current at Rated DC Blocking Voltage at T_A = 25 °C at T_A = 100 °C	I_R	1 10			mA
Typical Thermal Resistance [1]	$R_{\theta JA}$	80			°C/W
Typical Junction Capacitance [2]	C_J	110			pF
Operating and Storage Temperature Range	T_j,T_{stg}	- 65 to + 125			°C

[1] Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5" (12.7 mm) Lead Length.

[2] Measured at 1 MHz and applied reverse voltage of 4 volts.