#### SM5817 THRU SM5819 查询"SM5819"供应商

## 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

#### **Mechanical data**

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

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

5.2

SOLDERABLE ENDS

#### **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 <sub>RRM</sub>	20	30	40	V
Maximum RMS Voltage	and a	V <sub>RMS</sub>	14	21	28	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	20	30	40	V
Maximum Average Forward Rectified Current at T <sub>A</sub> = 90 °C		I <sub>F(AV)</sub>	1			Α
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)		I <sub>FSM</sub>	25			A
Maximum Instantaneous Forward Voltage at 1 A DC		V <sub>F</sub>	0.45	0.55	0.6	V
Maximum Instantaneous Forward Voltage at 3.1 A DC		V <sub>F</sub>	0.75	0.875	0.9	V
Maximum Average Reverse Current at Rated DC Blocking Voltage	at $T_A = 25 \text{ °C}$ at $T_A = 100 \text{ °C}$	I <sub>R</sub>	10 10		mA	
Typical Thermal Resistance <sup>1)</sup>		R <sub>0JA</sub>	80			°C/W
Typical Junction Capacitance <sup>2)</sup>		CJ	110			pF
Operating and Storage Temperature Range		T <sub>j</sub> ,T <sub>stg</sub>	- 65 to + 125			°C
		1				

<sup>1)</sup> Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5" (12.7 mm) Lead Length.

<sup>2)</sup> Measured at 1 MHz and applied reverse voltage of 4 volts.



# SEMTECH ELECTRONICS LTD.

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