

# SM5817 THRU SM5819

# SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

# VOLTAGE RANGE 20 to 40 Volts CURRENT 1.0 Ampere

#### **FEATURES**

- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.015 gram

## **MECHANICAL DATA**

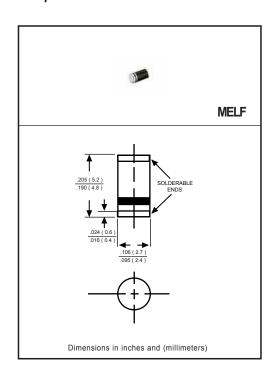
\* Epoxy : Device has UL flammability classification 94V-0

#### **DISCONTINUED-**

"This series is replaced by the FM581X series that meets to the same fit and function parameters and share the same solder pad layout. The FM581X series is preferred for error-free vacuum pick-up and PCB assembly.

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



## $\textbf{MAXIMUM RATINGS} \ (\textcircled{@} \ \texttt{TA=25} \ ^{\circ}\texttt{C} \ unless \ otherwise \ noted)$

RATINGS	SYMBOL	SM5817	SM5818	SM5819	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> = 90°C	lo	1.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>		Amps		
Typical Junction Capacitance (Note 1)	CJ		pF		
Operating Temperature Range	TJ	150			°C
Storage Temperature Range	T <sub>STG</sub>		۰c		

## ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

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CHARACTERISTICS		SYMBOL	SM5817	SM5818	SM5819	UNITS				
Maximum Instantaneous Forward Voltage at 1.0A DC		VF	.45	.55	.60	Volts				
Maximum Instantaneous Forward Voltage at 3.1A DC		V <sub>F</sub>	.75	.875	.90	Volts				
Maximum Average Reverse Current	@T <sub>A</sub> = 25°C	la la	0.2			mAmps				
at Rated DC Blocking Voltage	@T <sub>A</sub> = 100°C	l <sub>R</sub>		mAmps						

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".