

SHANGHAI SUNRISE ELECTRONICS CO., LTD.

1N5817 THRU 1N5819 SCHOTTKY BARRIER RECTIFIER

TECHNICAL SPECIFICATION

VOLTAGE: 20 TO 40V CURRENT: 1.0A

FEATURES

- Epitaxial construction for chip
- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed: 250°C/10sec/0.375"(9.5mm) lead length at 5 lbs tension

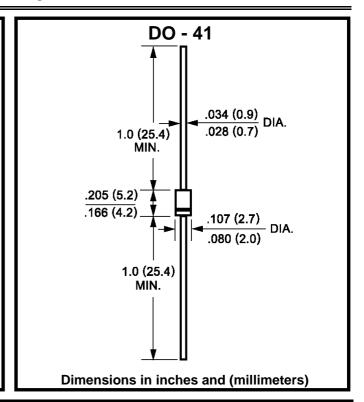
MECHANICAL DATA

 Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C

 Case: Molded with UL-94 Class V-O recognized flame retardant epoxy

· Polarity: Color band denotes cathode

Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	1N5817	1N5818	1N5819	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 (9.5mm lead length, at T _L =90°C)	I _{F(AV)}	1.0			А
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I _{FSM}	25			А
Maximum Forward Voltage (at 1.0A DC)	V_{F}	0.45	0.55	0.6	V
Maximum DC Reverse Current T _a =25°C	1.0				mA
(at rated DC blocking voltage) T _a =100°C	I _R 10.0			mA	
Typical Junction Capacitance (Note 1)	C_J	110			pF
Typical Thermal Resistance (Note 2)	R _θ (ja)	50			°C/W
Storage and Operation Junction Temperature	T_{STG},T_{J}	-65 to +125			°C

Note:

- 1.Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{dc}
- 2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, vertical P.C. board mounted