



Reverse Voltage 20 to 40 Volts

Schottky Barrier Rectifiers Forward Current 1.0 Ampere

Features

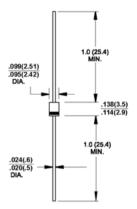
- ◆ Low power loss, high efficiency
- Low leakage
- ◆ Low forward voltage
- ◆ High current capability
- ◆ High speed switching
- High surge capabitity
- ♦ High reliability



R-1

Mechanical Data

- ◆ Case: Molded plastic
- ◆ Epoxy: UL 94V-O rate flame retardant
- ◆ Lead: MIL-STD-202E method 208C guaranteed
- Mounting position: Any
- ◆ Weight: 0.007 ounce, 0.20 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	1N17	1N18	1N19	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _L =90°C	I _(AV)	1.0			Amp
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	20.0			Amps
Maximum instantaneous forward voltage at 1.0A DC	V _F	0.450	0.550	0.600	Volts
Maximum instantaneous forward voltage at 3.1A DC	V _F	0.750	0.875	0.900	Volts
Maximum average reverse current @T _A = 25°C at peak reverse voltage @T _A = 100°C	l _R	1.0 10.0			mA
Typical thermal resistance (Note 1)	R _{eJA}	80			°C/W
Typical junction capacitance (Note 2)	C _J	110			pF
Operating junction temperature range	T _J	-55 to +125			°C
Storage temperature range	T _{STG}	-55 to +150			°C

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

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

RATINGS AND CHARACTERISTIC CURVES

