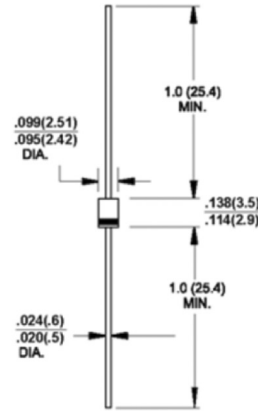


Features

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



R-1



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: MIL-STD-202E, Method 208C guaranteed
- Mounting position: Any
- Weight: 0.007ounce, 0.20gram

MAXIMUM RATINGS and ELECTRICAL 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	SYMBOL	1N17	1N18	1N19	UNIT
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current at TL	IF(AV)	1.0			A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	20			A
Maximum forward voltage at 1.0A DC	VF	0.45	0.5	0.50	V
Maximum forward voltage at 3.1A DC	VF	0.75	0.875	0.90	V
Maximum DC reverse current at rated DC blocking voltage	T _J =25°C	0.1			mA
	T _J =125°C	8			
Typical thermal resistance ¹⁾	R _{θJA}	100			°C/W
	R _{θJC}	55			
	R _{θJL}	50			
Typical junction capacitance 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 at .375(9.5mm) Lead Length, PC Board Mounted

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

RATINGS AND CHARACTERISTICS CURVES

FIG. 1 -- TYPICAL FORWARD CURRENT DERATING CURVE

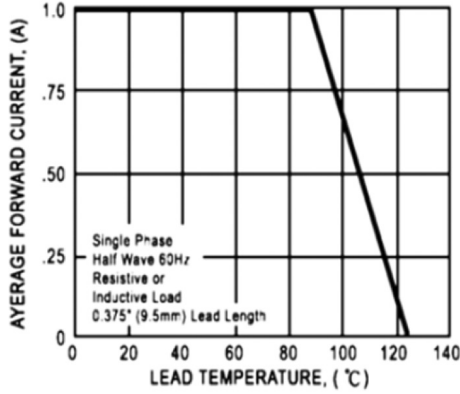


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

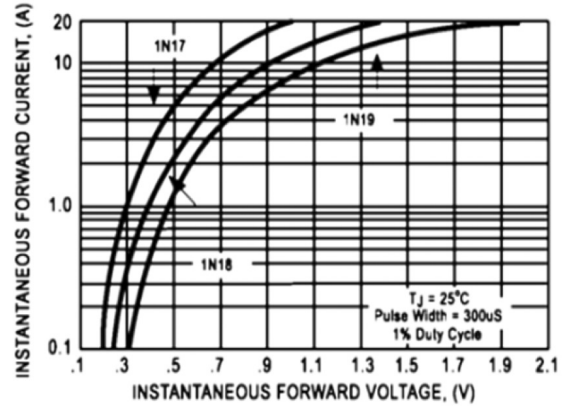


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

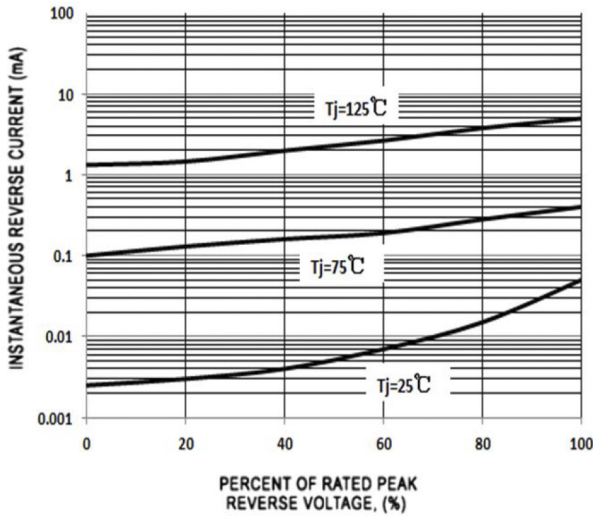


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

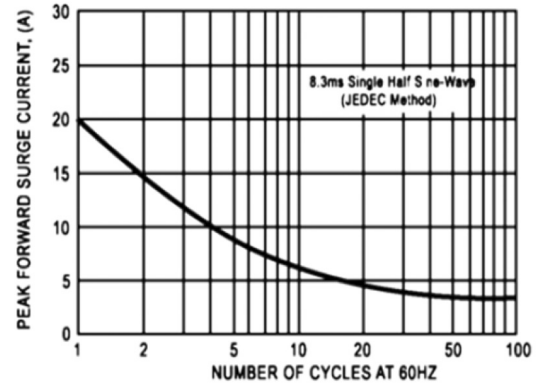


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

