

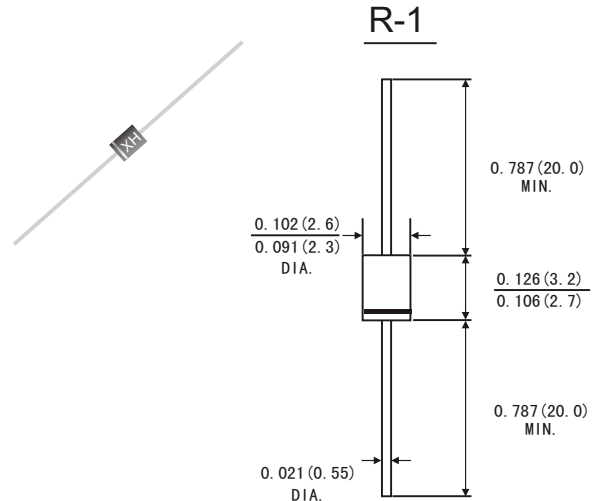


## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability, High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching, Low leakage
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

## MECHANICAL DATA

- *Case:* R-1 molded plastic body
- *Terminals:* Lead solderable per MIL-STD-750, method 2026
- *Polarity:* Color band denotes cathode end
- *Mounting Position:* Any
- *Weight:* 0.007ounce, 0.19 gram



Dimensions in inches and (millimeters)

## 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%)

	Symbols	1U1	1U2	1U3	1U4	1U5	1U6	1U7	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm)lead length at T <sub>A</sub> =50°C	I <sub>(AV)</sub>	1.0							Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V <sub>F</sub>	1.0		1.3		1.7			Volts
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>R</sub>	5.0							μA
Maximum full load reverse current full cycle average. 0.375"(9.5mm)lead length at T <sub>L</sub> =55°C		100							
Maximum reverse recovery time(Note 1)	T <sub>rr</sub>	50				70			ns
Typical junction Capacitance(Note 2)	C <sub>J</sub>	20				15			pF
Operating and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-65 to +150							°C

**Notes:** 1. Test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A.

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



FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

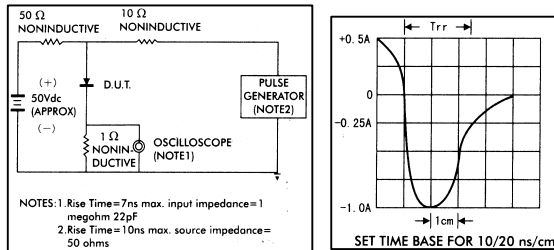


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

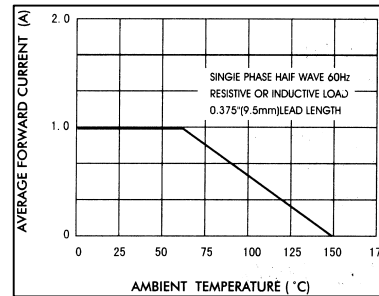


FIG.3-TYPICAL FORWARD CHARACTERISTICS

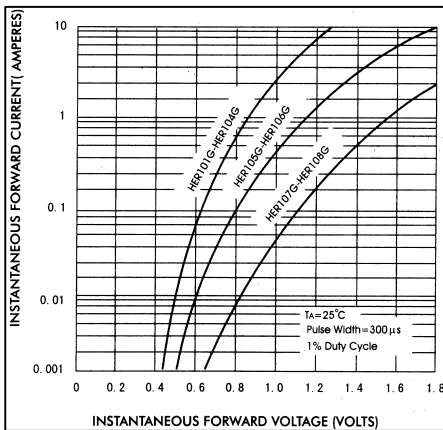


FIG.4-TYPICAL REVERSE CHARACTERISTICS

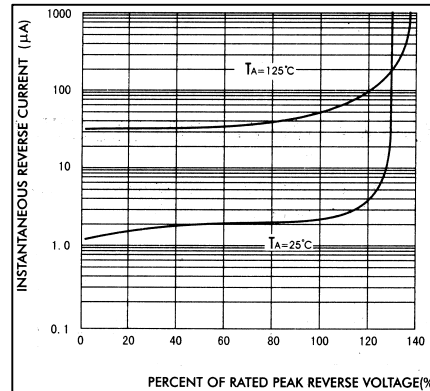


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

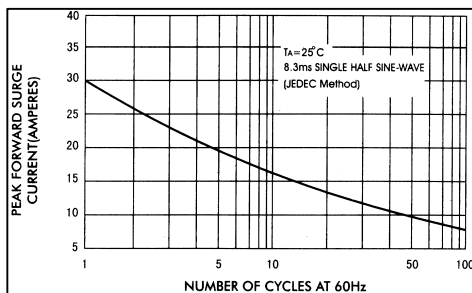


FIG.6-TYPICAL JUNCTION CAPACITANCE

