

1.0Amp High Efficiency Rectifiers

1H1~1H8

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- High speed switching for high efficiency
- Open-Junction chip ,silastic passivated
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds,0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

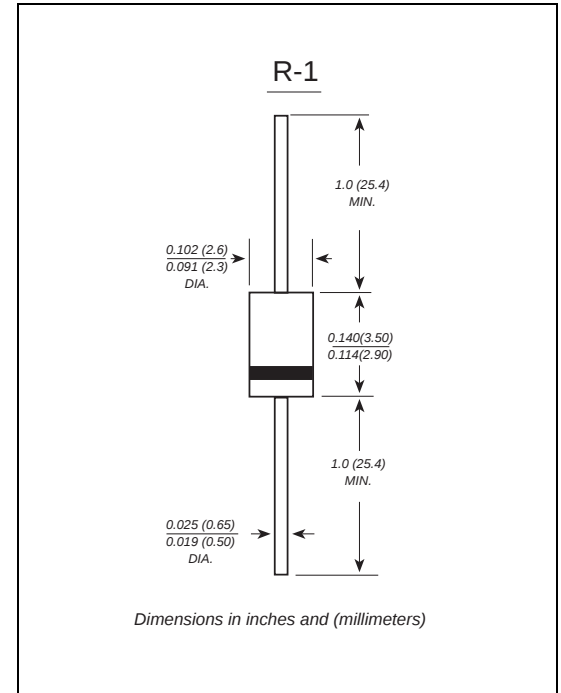
Case: R-1 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.007 ounce, 0.20grams



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 current derate by 20%.

	SYMBOLS	1H1	1H2	1H3	1H4	1H5	1H6	1H7	1H8	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	300	400	600	800	1000	VOLTS
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	560	700	VOLTS
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375”(9.5mm) lead length at T _A =25°C	I _(AV)	1.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25.0								Amps
Maximum instantaneous forward voltage at 1.0A	V _F	1.0			1.3		1.70			Volts
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	5.0 100.0								µA
Maximum reverse recovery time (NOTE 1)	t _{rr}	50					70			ns
Typical junction capacitance (NOTE 2)	C _J	15.0					12.0			pF
Typical thermal resistance (NOTE 3)	R _{θJA}	50.0								°C/W
Operating junction and storage temperature range	T _J ,T _{STG}	-65 to +150								°C

Note:1.Reverse recovery time test condition: $I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$

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

3.Thermal resistance from junction to ambient at 0.375 "(9.5mm)lead length,P.C.B. mounted

Ratings And Characteristic Curves

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FIG. 1- FORWARD CURRENT DERATING CURVE

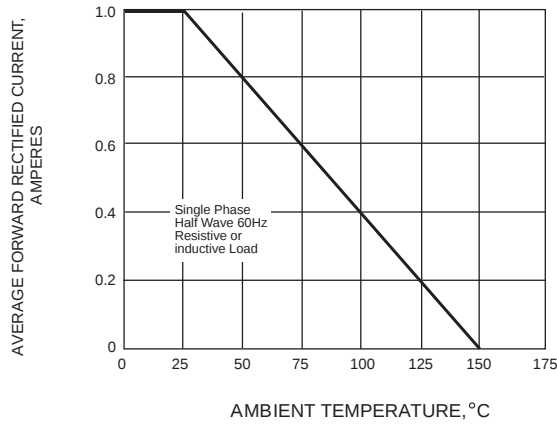


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

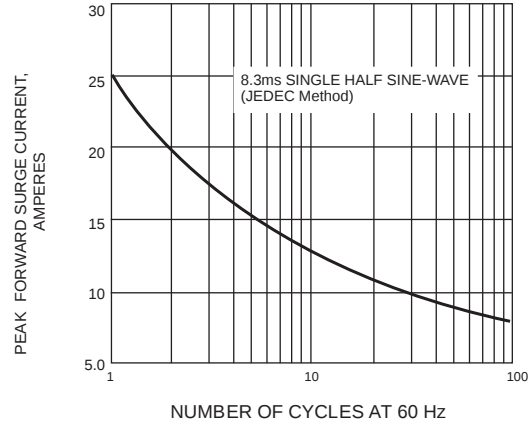


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

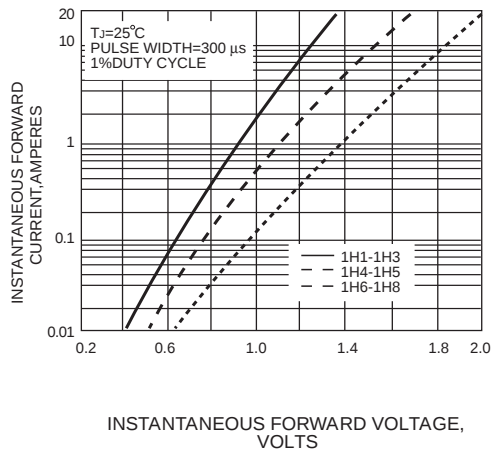


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

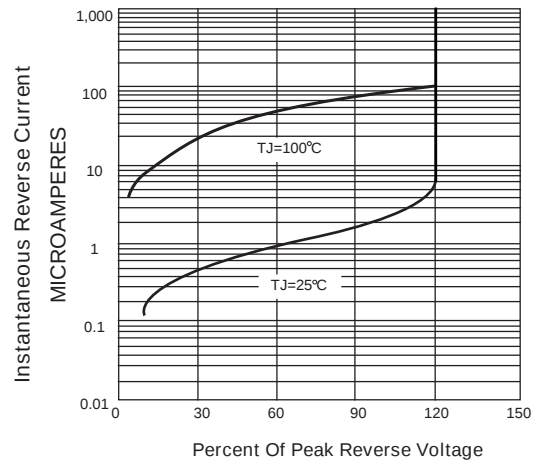


FIG. 5-TYPICAL JUNCTION CAPACITANCE

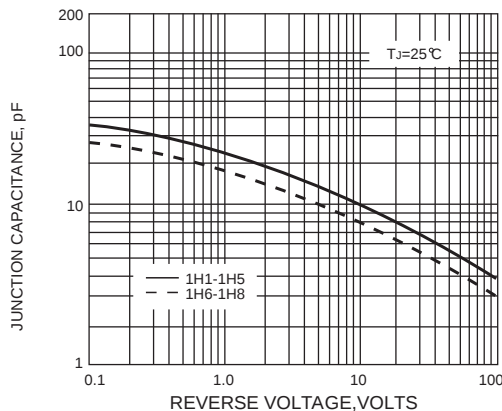


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

