

1A1 THRU 1A7

1.0 AMP. SILICON RECTIFIERS

Voltage Range 50 to 1000 Volts Current 1.0 Amperes

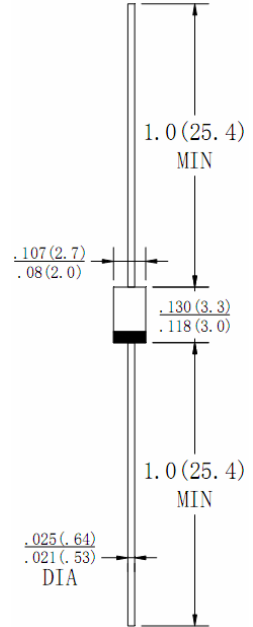
R-1

Features

- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High reliability
- ◆ High surge current capability

Mechanical Data

- ◆ Cases: Molded plastic
- ◆ Epoxy: UL 94V-0 rate flame retardant
- ◆ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ◆ Polarity: Color band denotes cathode end
- ◆ High temperature soldering guaranteed; 250°C /10 seconds/.375"(9.5mm)lead,Lengths at 5 lbs.,(2.3kg) tension
- ◆ Weight:0.20 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Type Number		1A1	1A2	1A3	1A4	1A5	1A6	1A7	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead length @ $T_A=25^\circ C$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25							A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.0							V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	I_R	5.0 50.0							μA
Typical Thermal Resistance (Note)	$R_{\theta JA}$	50							$^\circ C/W$
Operating Temperature Range	T_J	-65 to +125							$^\circ C$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ C$

NOTE: : 1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length.

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RATING AND CHARACTERISTIC CURVES

FIG. 1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER

BRIDGE ELEMMENT

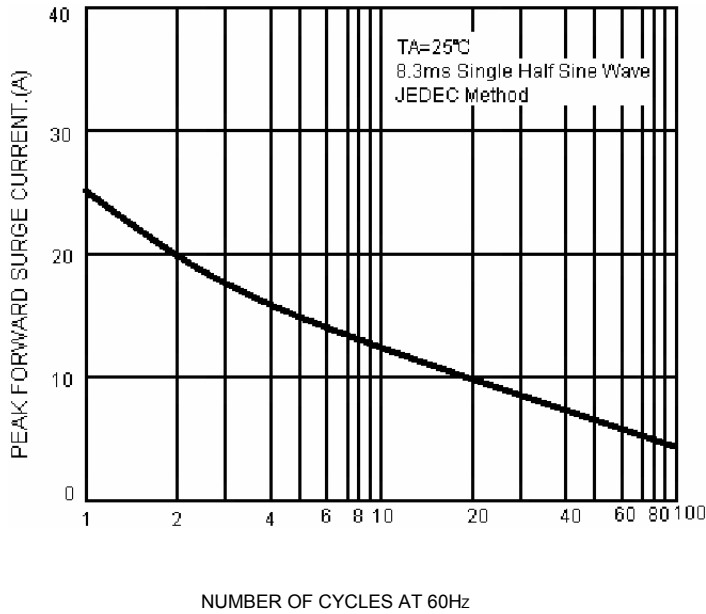


FIG. 2-MAXIMUM FORWARD CURRENT DERATING CURVE

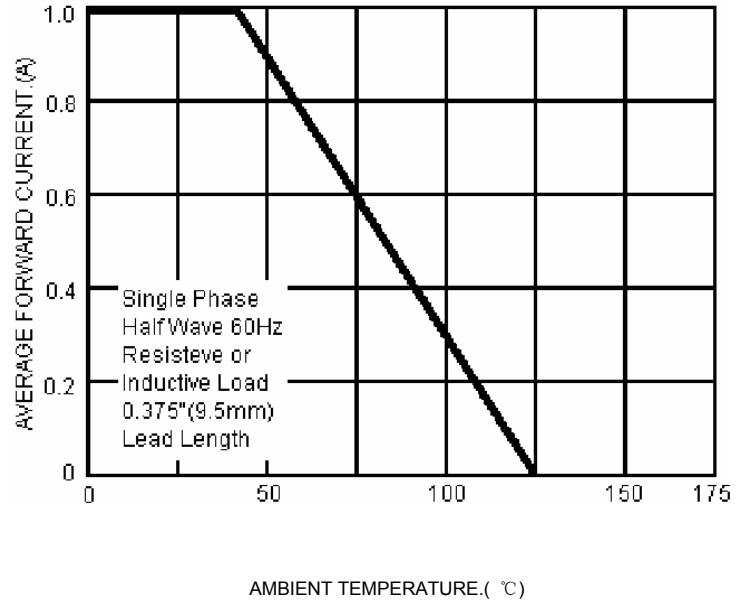


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

PER BRIDGE ELEMENT

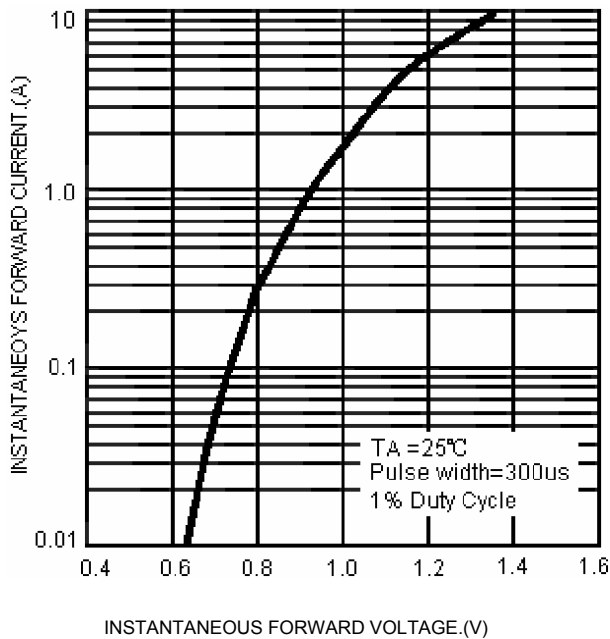
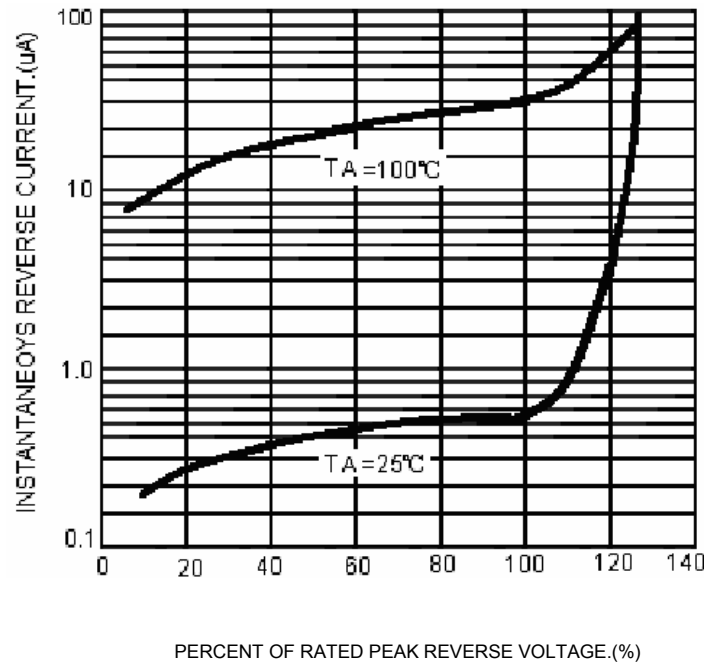


FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice.