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1A1 THRU 1A7

1.0 AMP. SILICON RECTIFIERS

Voltage Range 50 to 1000 Volts Current 1.0 Amperes

R-1

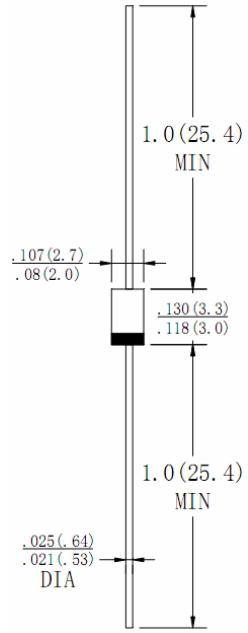
Features

◆Low forward voltage drop

◆High current capability

◆High reliability

◆High surge current capability



Dimensions in inches and (millimeters)

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,60Hz,resistiver or inductive load. For capactitive 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°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°C at rated DC blocking voltage @ T_A=100°C	I_R	5.0 50.0							μA
Typical Thermal Resistance (Note)	$R_{\theta JA}$	50							℃/W
Operating Temperature Range	T_J	-65 to +125							℃
Storage Temperature Range	T_{STG}	-65 to +150							℃

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

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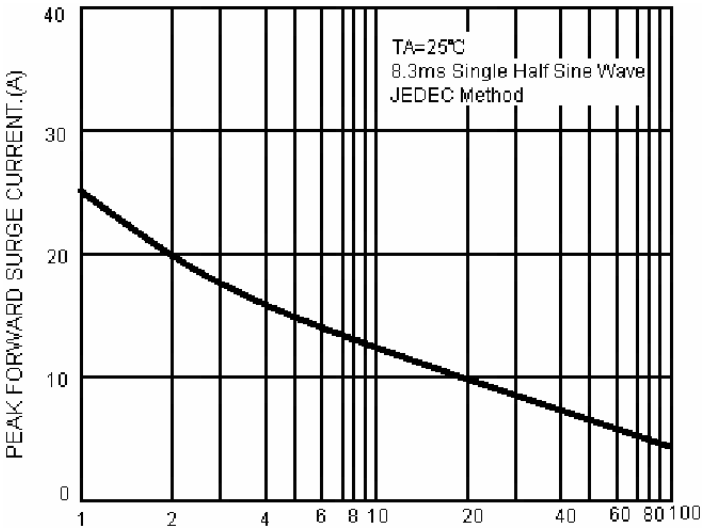
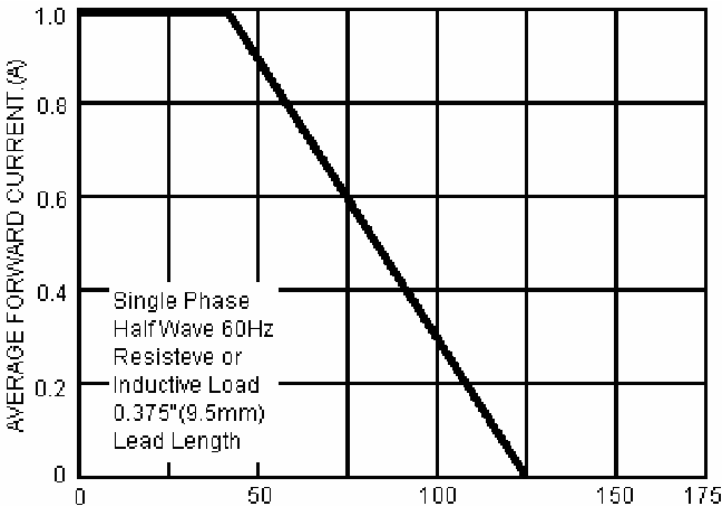
RATING AND CHARACTERISTIC CURVES

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



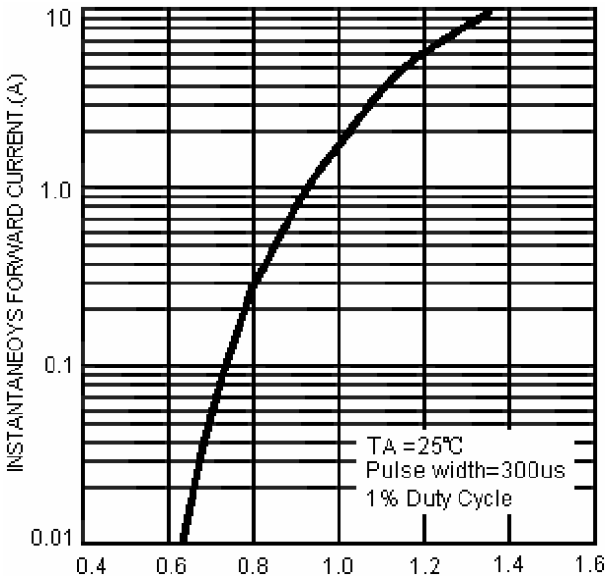
NUMBER OF CYCLES AT 60Hz

FIG. 2-MAXIMUM FORWARD CURRENT DERATING CURVE



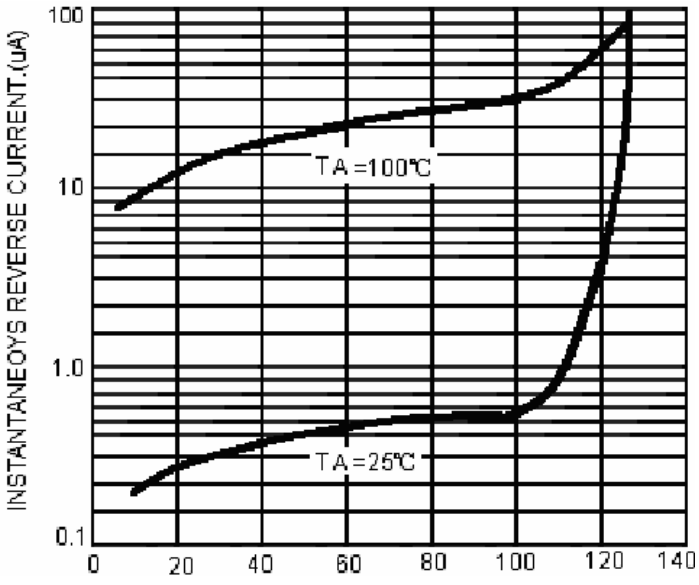
AMBIENT TEMPERATURE.(℃)

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT



INSTANTANEOUS FORWARD VOLTAGE.(V)

FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



PERCENT OF RATED PEAK REVERSE VOLTAGE.(%)

Note: Specifications are subject to change without notice.