Elektronische Bauelemente

1A1 THRU 1A7

VOLTAGE 50V ~ 1000V

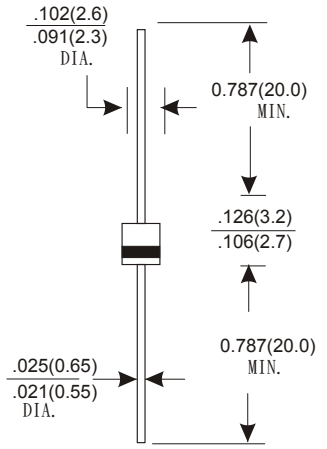
1.0 AMP Silicon Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

R-1

FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Lead, Solder Able per MIL-STD-202, Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any
- Weight: 0.19 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25℃ 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 Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current, .375" (9.5mm) Lead Length at Ta=75 ℃	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	25							A
Maximum Instantaneous Forward Voltage at 1.0A	1.0							V
Maximum DC Reverse Current Ta = 25 ℃ at Rated DC Blocking Voltage Ta = 100 ℃	5.0 50							μA
Typical Junction Capacitance (Note1)	15							pF
Typical Thermal Resistance RθJA (Note 2)	60							℃ / W
Operating and Storage Temperature Range T_J, T_{STG}	-65 ~ +175							℃

NOTES:
1. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length.

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●RATING AND CHARACTERISTIC CURVES (1A1 THRU 1A7)

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

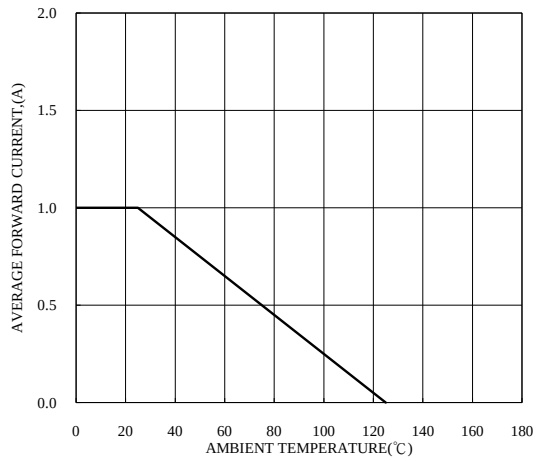

FIG. 2-TYPICAL FORWARD CHARACTERISTICS

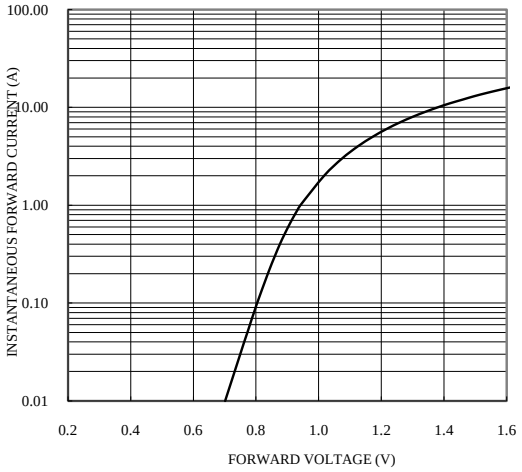

FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

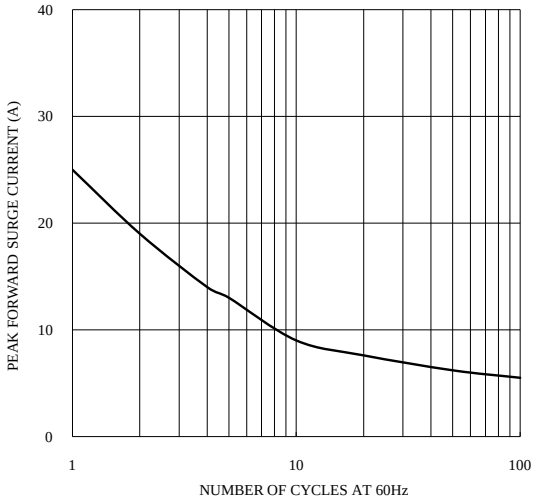

FIG. 5-TYPICAL REVERSE CHARACTERISTICS

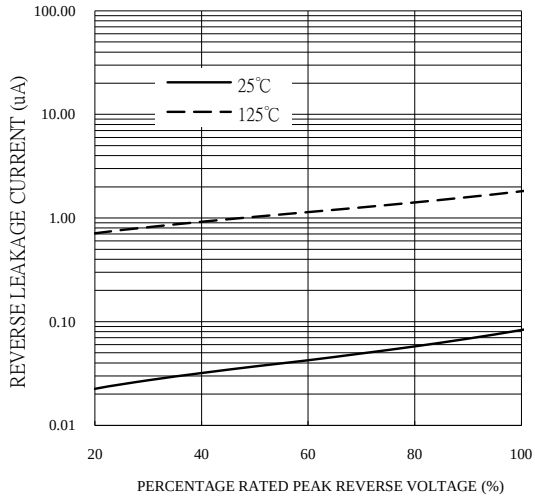

FIG. 4-TYPICAL JUNCTION CAPACITANCE