



Elektronische Bauelemente

1A1 THRU 1A7

VOLTAGE 50V ~ 1000V
1.0 AMP Silicon Rectifiers

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



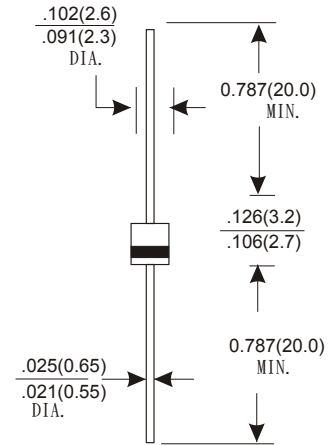
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FEATURES

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

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



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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 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 °C | 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 °C | 5.0 | | | | | | | µA |
| at Rated DC Blocking Voltage Ta = 100 °C | 50 | | | | | | | µA |
| Typical Junction Capacitance (Note 1) | 15 | | | | | | | pF |
| Typical Thermal Resistance RθJA (Note 2) | 60 | | | | | | | °C / W |
| Operating and Storage Temperature Range T _J , T _{STG} | -65 ~ +175 | | | | | | | °C |

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.

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

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

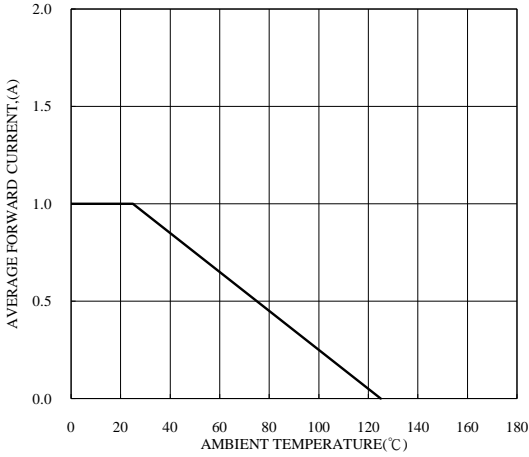


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

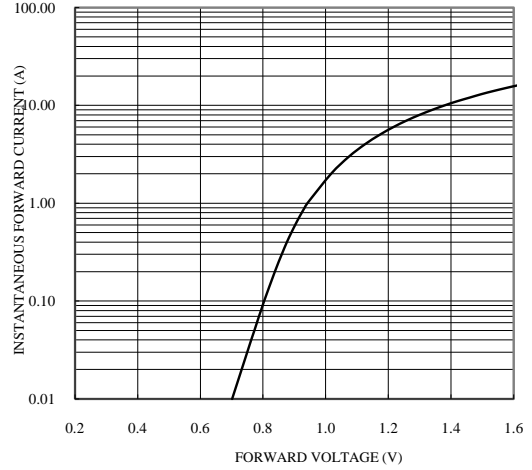


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

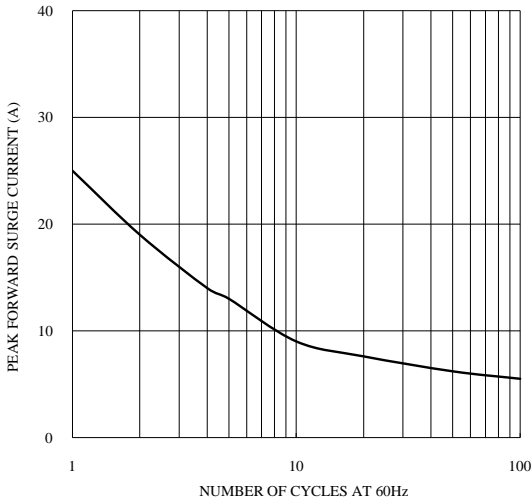


FIG. 5-TYPICAL REVERSE CHARACTERISTICS

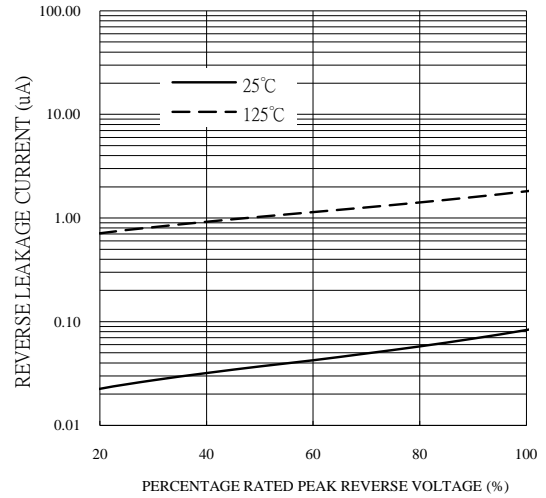


FIG. 4-TYPICAL JUNCTION CAPACITANCE

