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S1A THRU S1M

SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

FEATURES

◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0

- ◆For surface mounted applications
- ◆Low reverse leakage
- ◆Built-in strain relief, ideal for automated placement
- High forward surge current capability
- ◆High temperature soldering guaranteed:

250℃/10 seconds at terminals

MECHANICAL DATA

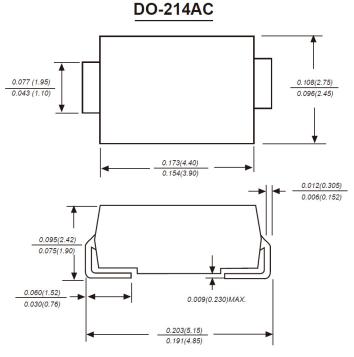
Case: JEDEC DO-214AC molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.075 grams



Dimensions in inches and (millimeters)

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 | S1A | S1B | S1D | S1G | S1J | S1K | S1M | UNITS |
|--|---------|-------------|-----|-----|-----|-----|-----|------|------------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | VOLTS |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum average forward rectified current at TL=55°C | I(AV) | | | | 1.0 | | | | Amp |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | Ігѕм | 30.0 | | | | | | | Amps |
| Maximum instantaneous forward voltage at 1.0A | VF | 1.1 | | | | | | | Volts |
| Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C | lR | 5.0 50.0 | | | | | | | μΑ |
| Typical junction capacitance (NOTE 1) | Сл | 15.0 | | | | | | | pF |
| Typical thermal resistance (NOTE 2) | Reja | 75.0 | | | | | | | °C/W |
| Operating junction and storage temperature range | ТJ,Тsтg | -65 to +175 | | | | | | | $^{\circ}$ |

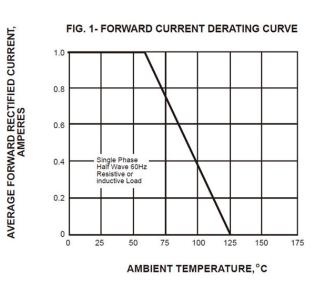
Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

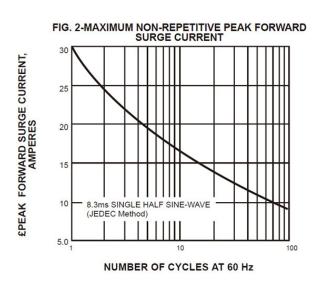
2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

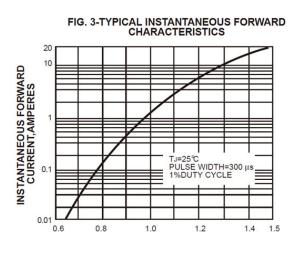
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S1A THRU S1M

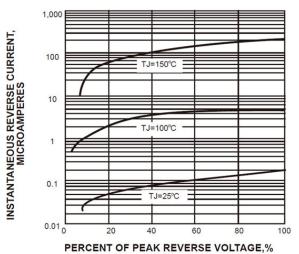
RATINGS AND CHARACTERISTIC CURVES S1A THRU S1M













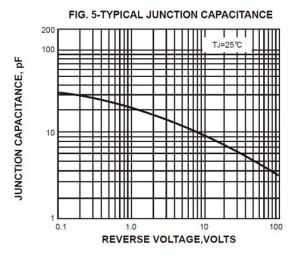
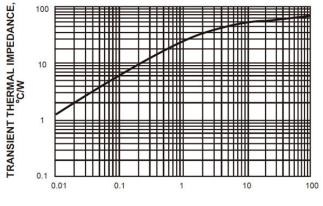


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



t,PULSE DURATION,sec.

Note: Specifications are subject to change without notice.