

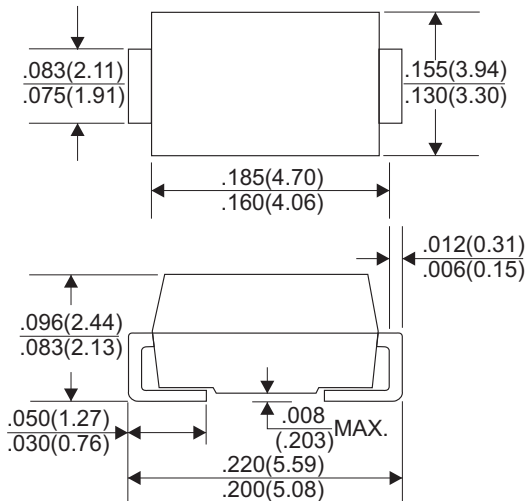


S5AB THRU S5MB

SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 5.0 Ampere

DO-214AA(SMB)



Dimensions in inches and (millimeters)

FEATURES

- * Glass passivate device
- * Ideal for surface mounted applications
- * Low reverse leakage
- * Metallurgically bonded construction
- * High temperature soldering guaranteed:
250°C/10 seconds 0.375"(9.5mm)lead length,
5 lbs.(2.3kg) tension

MECHANICAL DATA

- * Case: JEDEC SMB molded plastic
- * Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any

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 | S5AB | S5BB | S5DB | S5GB | S5JB | S5KB | S5MB | 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 At T _L =75°C | 5.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 100 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 5.0A | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | 5.0 | | | | | | | μA |
| Typical Junction Capacitance (Note 1) | 60 | | | | | | | pF |
| Typical Thermal Resistance R _{θJL} (Note 2) | 10 | | | | | | | °C/W |
| Operating and Storage Temperature Range T _J , T _{stg} | -65 — +150 | | | | | | | °C |
| Marking Code | S5A | S5B | S5D | S5G | S5J | S5K | S5M | |

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

RATING AND CHARACTERISTIC CURVES (S5AB THRU S5MB)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

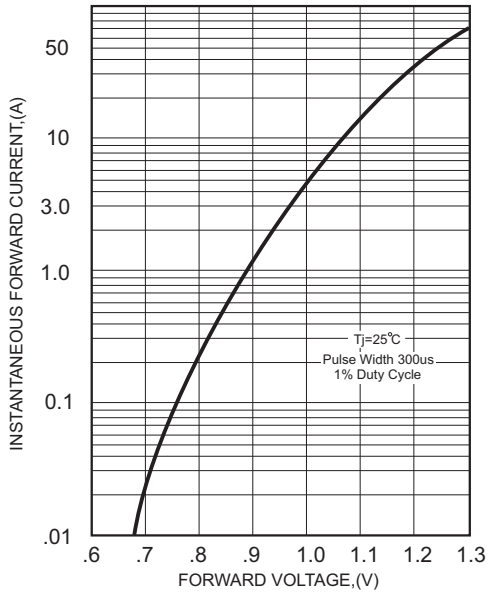


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

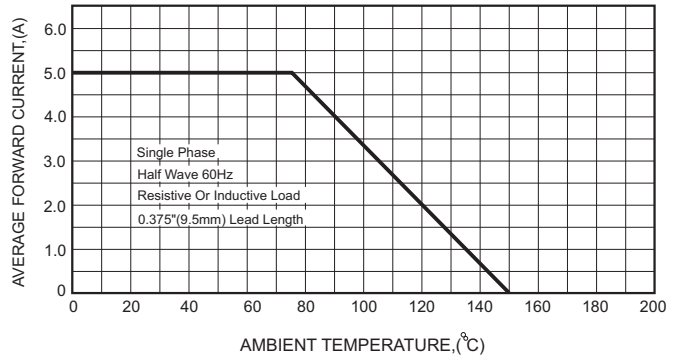


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

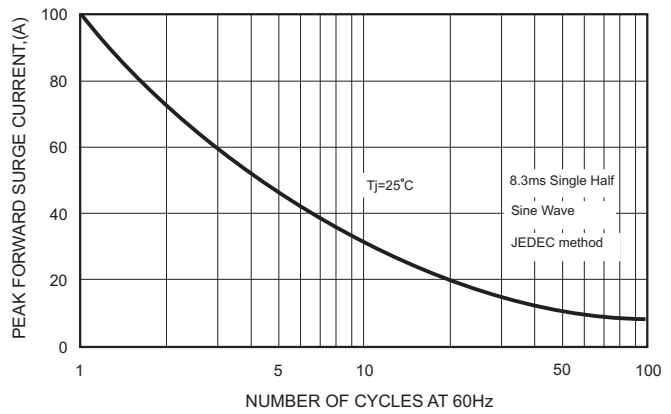


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

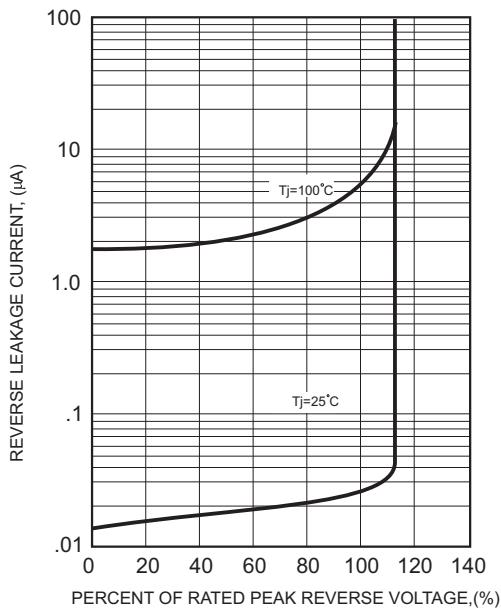


FIG.5-TYPICAL JUNCTION CAPACITANCE

