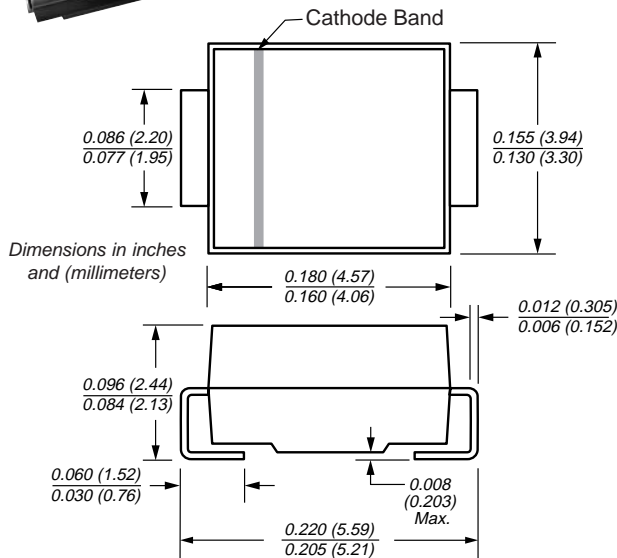




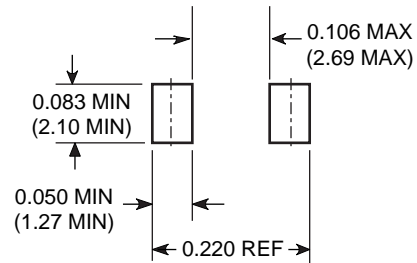
Surface Mount Schottky Rectifiers

Reverse Voltage 20 to 60V
Forward Current 2.0A

DO-214AA (SMB)



Mounting Pad Layout



Mechanical Data

Case: JEDEC DO-214AA molded plastic body
Terminals: Solder plated, solderable per MIL-STD750, Method 2026
 High temperature soldering guaranteed:
 250°C/10 seconds at terminals
Polarity: Color band denotes cathode end
Weight: 0.003 oz., 0.093 g

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

| Parameter | Symbol | SS22 | SS23 | SS24 | SS25 | SS26 | Unit |
|--|--------------------------------------|-------------|------|------|-------------|------|------|
| Device marking code | | S2 | S3 | S4 | S5 | S6 | |
| Maximum repetitive peak reverse voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | V |
| Maximum RMS voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | V |
| Maximum DC blocking voltage | V _{DC} | 20 | 30 | 40 | 50 | 60 | V |
| Max. average forward rectified current at T _L (See Fig. 1) | I _{F(AV)} | 2.0 | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 75 | | | | | A |
| Typical thermal resistance ⁽²⁾ | R _{θJA} R _{θJL} | 75 17 | | | | | °C/W |
| Operating junction temperature range | T _J | -65 to +125 | | | -65 to +150 | | °C |
| Storage temperature range | T _{STG} | -65 to +150 | | | | | °C |

Electrical Characteristics (T_A = 25°C unless otherwise noted)

| | | | | | | |
|---|----------------|------|--|------|--|----|
| Maximum instantaneous forward voltage at 2.0A ⁽¹⁾ | V _F | 0.50 | | 0.70 | | V |
| Maximum DC reverse current ⁽¹⁾ at rated DC blocking voltage | I _R | 0.4 | | 10 | | mA |

Notes: (1) Pulse test: 300μs pulse width, 1% duty cycle
 (2) Thermal resistance junction to lead P.C.B. mounted 0.375" (9.5mm) lead length

SS22 thru SS26



Vishay Semiconductors
formerly General Semiconductor

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

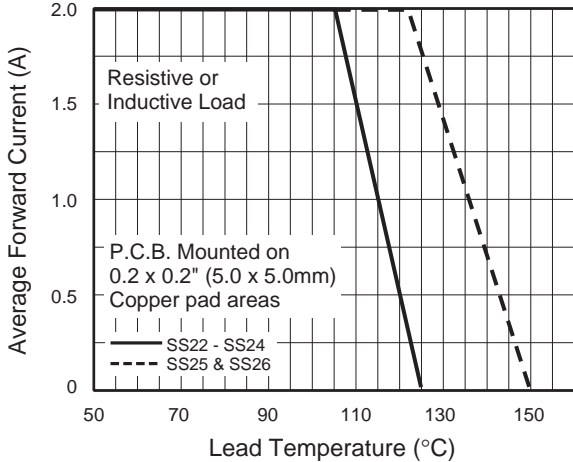


Fig. 2 - Maximum Non-repetitive Surge Current

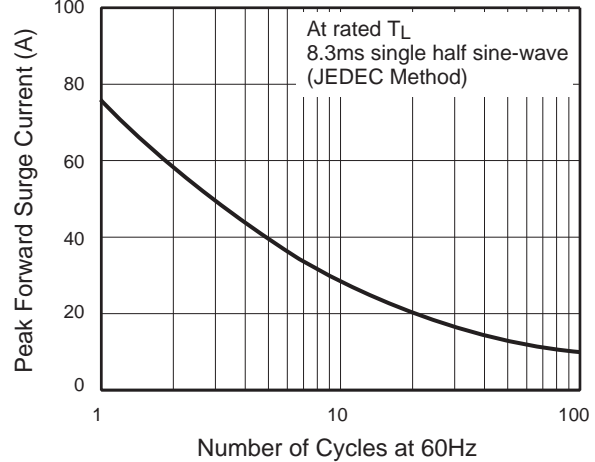


Fig. 3 - Typical Instantaneous Forward Characteristics

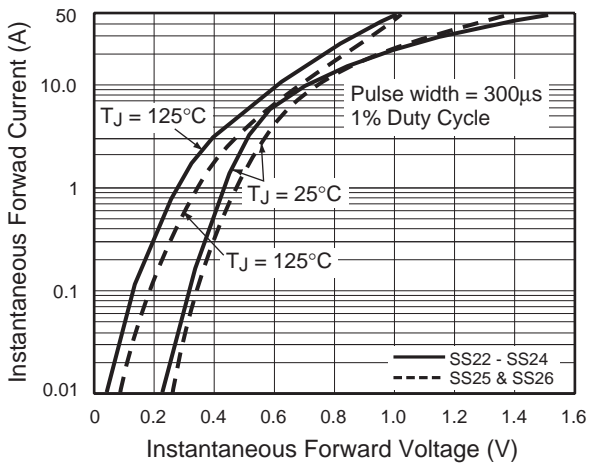


Fig. 4 - Typical Reverse Current Characteristics

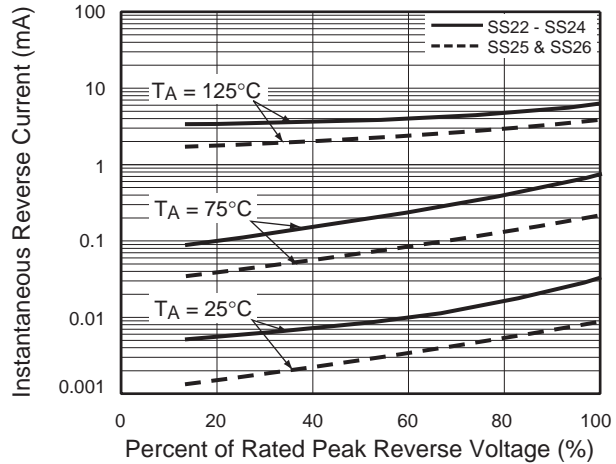


Fig. 5 - Typical Junction Capacitance

