



# SS34AFH THRU SS320AFH

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

**REVERSE VOLTAGE:** 40 to 200 VOLTS

**FORWARD CURRENT:** 3.0 AMPERE

### FEATURES

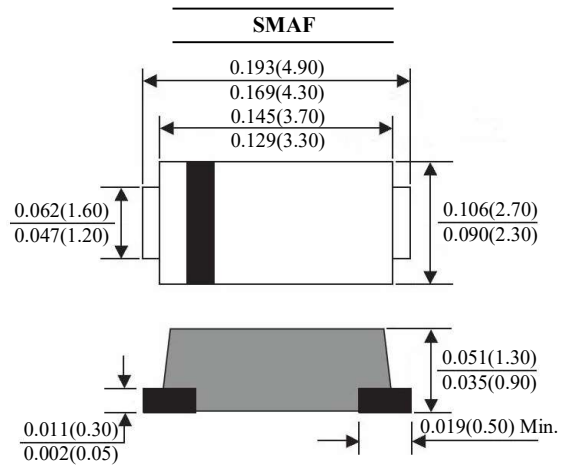
- Low forward voltage drop
- Low power loss, high efficiency
- High forward surge current capability
- Suffix "H" indicates Halogen-free parts, ex. SS34AFH

### MECHANICAL DATA

Case : Molded plastic, SMAF

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

Polarity : Color band denotes cathode end



### 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, derate current by 20%.

| Parameter   | Symbols         | SS34AFH     | SS36AFH | SS310AFH | SS315AFH    | SS320AFH | Units |
|---|-----------------|-------------|---------|----------|-------------|----------|-------|
| Maximum Recerrent Peak Reverse Voltage  | $V_{RRM}$       | 40          | 60      | 100      | 150         | 200      | Volts |
| Maximum RMS Voltage   | $V_{RMS}$       | 28          | 42      | 70       | 105         | 70       | Volts |
| Maximum DC Blocking Voltage   | $V_{DC}$        | 40          | 60      | 100      | 150         | 100      | Volts |
| Maximum Average Forward Rectified Current<br>$T_L$ (see FIG. 1)   | $I_{(AV)}$      | 3.0         |         |          |             |          | Amp   |
| Peak Forward Surge Current,<br>8.3ms single half-sine-wave<br>superimposed on rated load (JEDEC method)         | $I_{FSM}$       | 80          |         |          |             |          | Amp   |
| Maximum Forward Voltage at 3.0A   | $V_F$           | 0.55        | 0.70    | 0.85     | 0.95        |          | Volts |
| Maximum Reverse Current<br>at $T_A=25^\circ\text{C}$<br>at Rated DC Blocking Voltage<br>$T_A=100^\circ\text{C}$ | $I_R$           | 0.5         |         | 0.2      |             |          | mAmp  |
|   |                 | 20.0        |         | 10.0     |             |          |       |
| Typical Thermal Resistance (Note 1)   | $R_{\theta JA}$ | 65          |         |          |             |          | °C/W  |
| Operating Junction Temperature Range  | $T_J$           | -65 to +125 |         |          | -65 to +150 |          | °C    |
| Storage Temperature Range   | $T_{stg}$       | -65 to +150 |         |          |             |          | °C    |

#### NOTES:

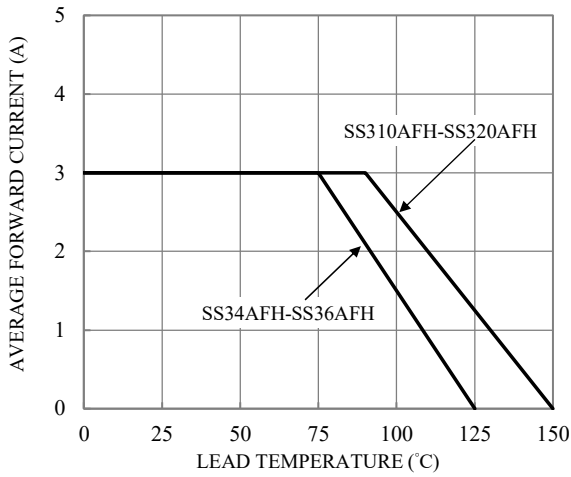
1- Thermal resistance from junction to ambient mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



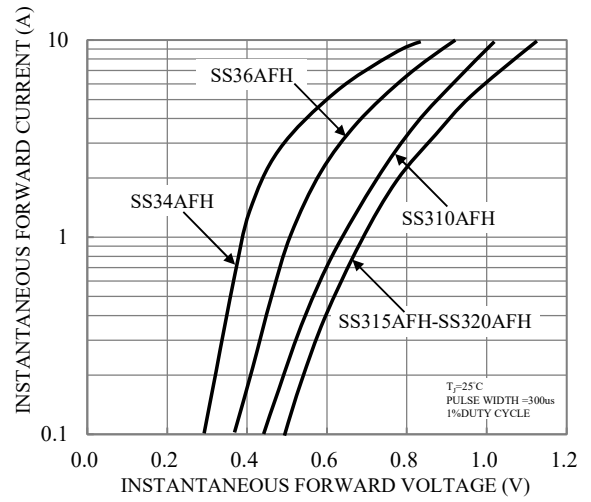
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## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

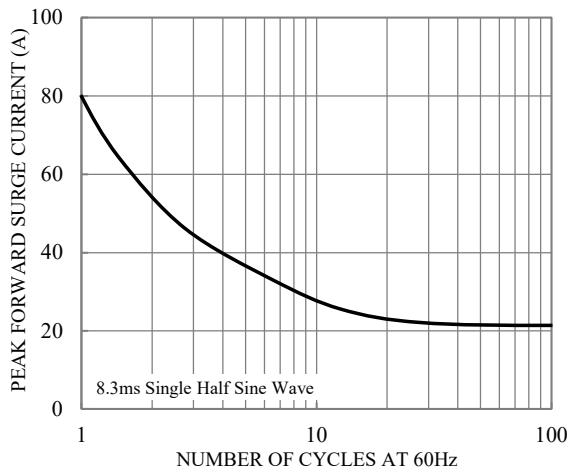
### RATINGS AND CHARACTERISTIC CURVES



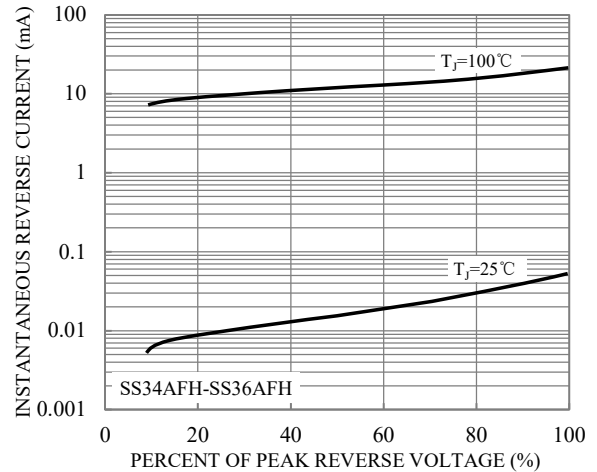
**Fig.1-FORWARD CURRENT DERATING CURVE**



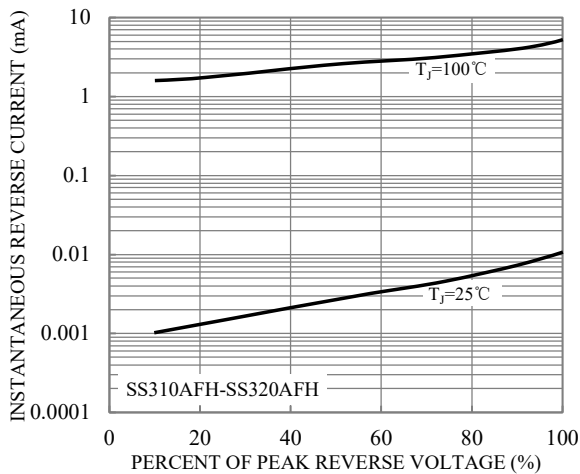
**Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT**



**Fig.4-TYPICAL REVERSE CHARACTERISTICS**



**Fig.5-TYPICAL REVERSE CHARACTERISTICS**