



# SS14AFH THRU SS120AFH

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

**REVERSE VOLTAGE:** 40 to 200 VOLTS

**FORWARD CURRENT:** 1.0 AMPERE

### FEATURES

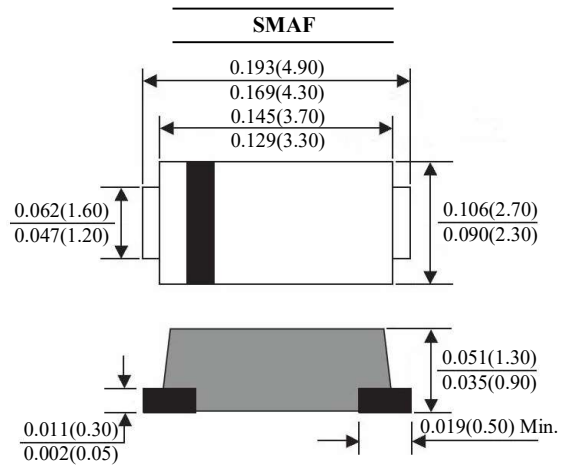
- Low forward voltage drop
- Low power loss, high efficiency
- High forward surge current capability
- Suffix "H" indicates Halogen-free parts, ex. SS14AFH

### MECHANICAL DATA

Case : Molded plastic, SMAF

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

Polarity : Color band denotes cathode end



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, derate current by 20%.

Parameter	Symbols	SS14AFH	SS16AFH	SS110AFH	SS115AFH	SS120AFH	Units
Maximum Recurrent 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 $T_L$ (see FIG. 1)	$I_{(AV)}$	1.0					Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30					Amp
Maximum Forward Voltage at 1.0A	$V_F$	0.55	0.70	0.85	0.95		Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	$I_R$	0.5		0.2			mAmp
		50.0		10.0			
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	70					°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:

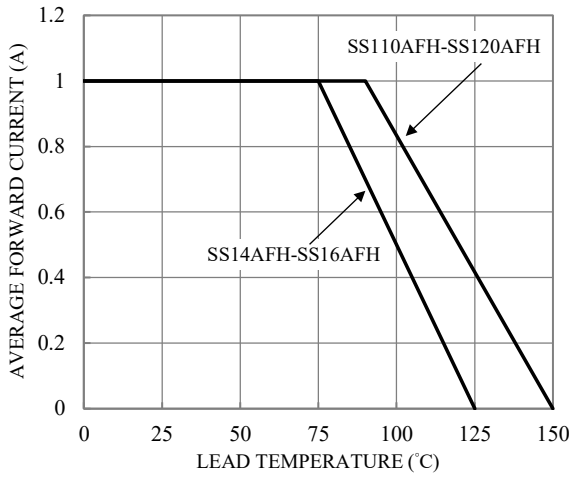
1- Thermal resistance from junction to ambient mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



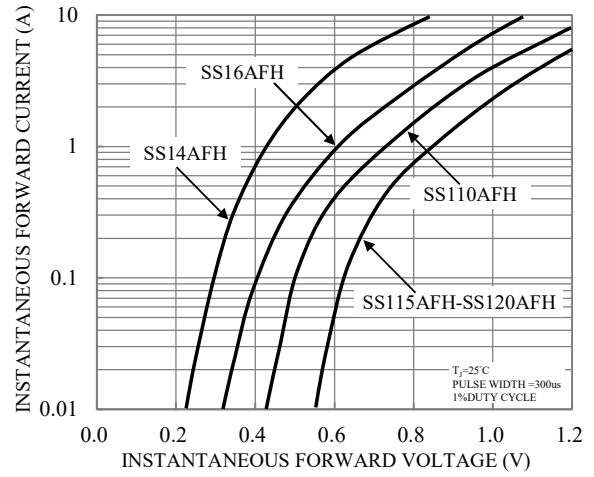
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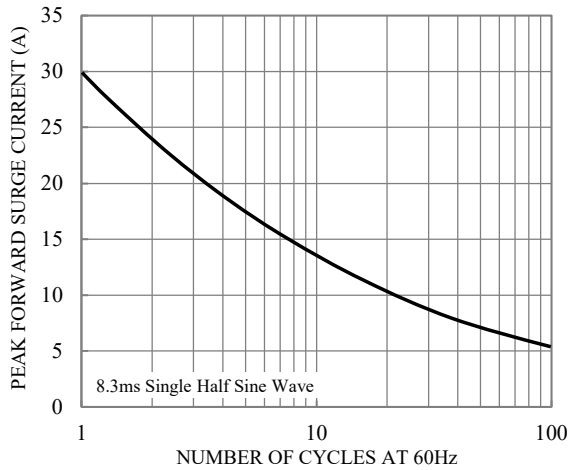
### RATINGS AND CHARACTERISTIC CURVES



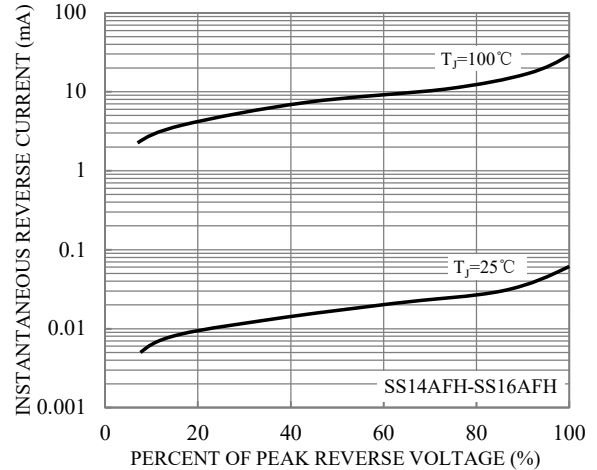
**Fig.1-FORWARD CURRENT DERATING CURVE**



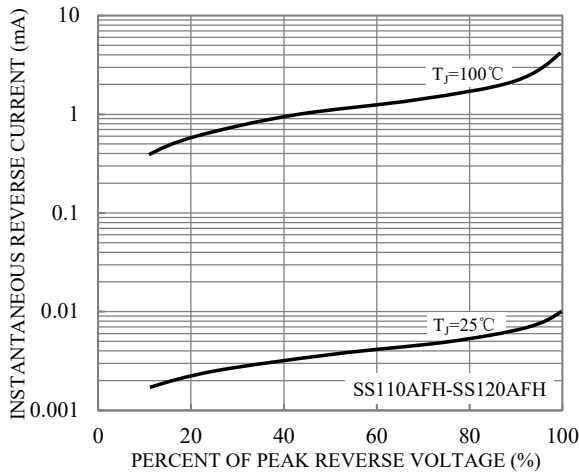
**Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



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



**Fig.4-TYPICAL REVERSE CHARACTERISTICS**



**Fig.5-TYPICAL REVERSE CHARACTERISTICS**