



S3ABFH THRU S3MBFH

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS

REVERSE VOLTAGE: 50 to 1000VOLTS

FORWARD CURRENT: 3.0 AMPERE

FEATURES

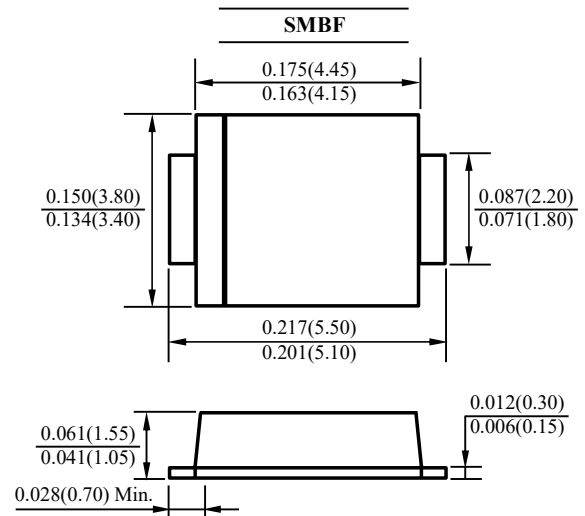
- Glass passivated junction chip
- Low reverse leakage
- High forward surge current capability
- Suffix "H" indicates Halogen-free parts, ex. S3ABFH

MECHANICAL DATA

Case : Molded plastic, SMBF

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	S3ABFH	S3BBFH	S3DBFH	S3GBFH	S3JBFH	S3KBFH	S3MBFH	Units
		S3ABF	S3BBF	S3DBF	S3GBF	S3JBF	S3KBF	S3MBF	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	3							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100							Amp
Maximum Forward Voltage at 3.0A	V_F	1.10							Volts
Maximum Reverse Current at $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_J=125^\circ\text{C}$	I_R	5.0 200.0							μAmp
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	75							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150							$^\circ\text{C}$

NOTES:

1- Thermal resistance from junction to ambient mounted on P.C.B. with 8.0 mm x 8.0 mm copper pad areas



S3ABFH THRU S3MBFH

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS

RATINGS AND CHARACTERISTIC CURVES

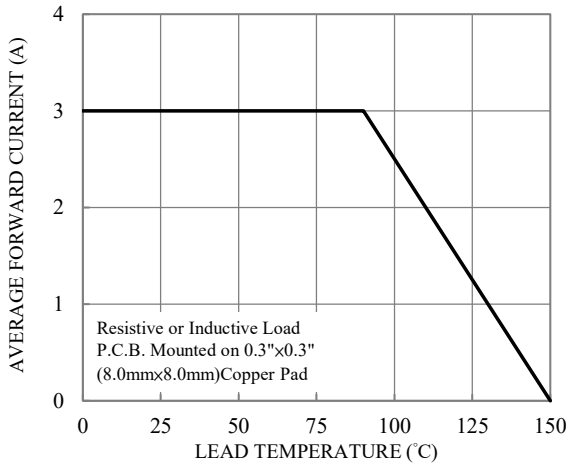


Fig.1-FORWARD CURRENT DERATING CURVE

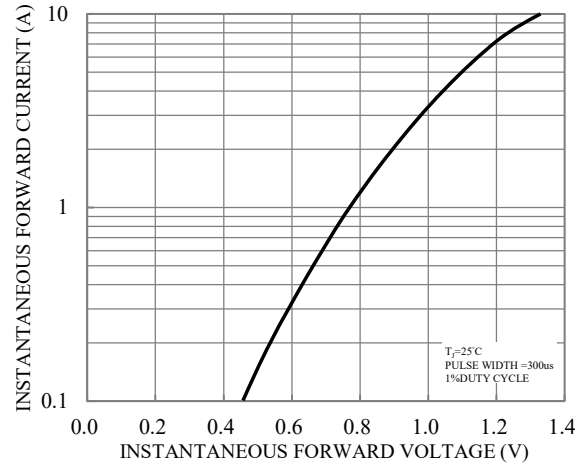


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

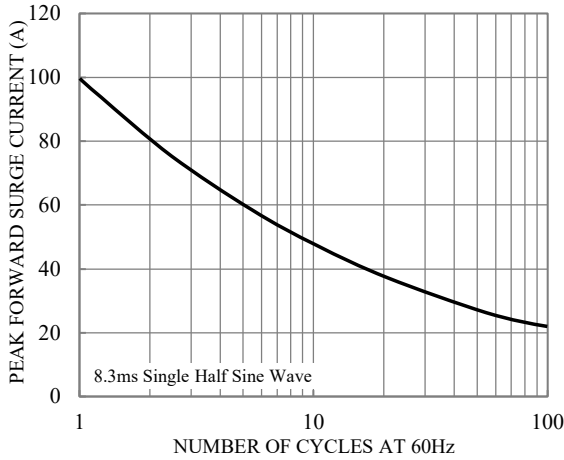


Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

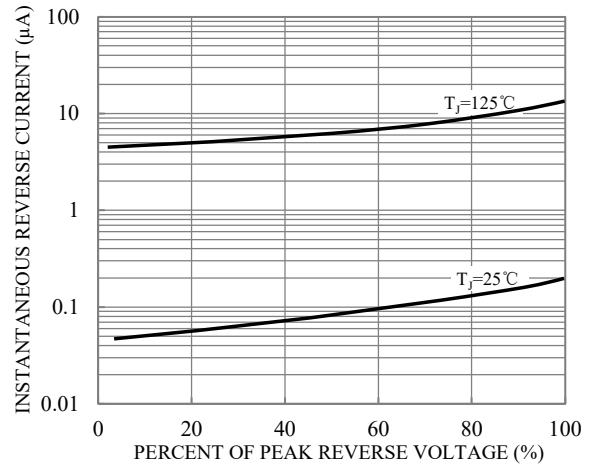


Fig.4-TYPICAL REVERSE CHARACTERISTICS