SS12F THRU SS120F

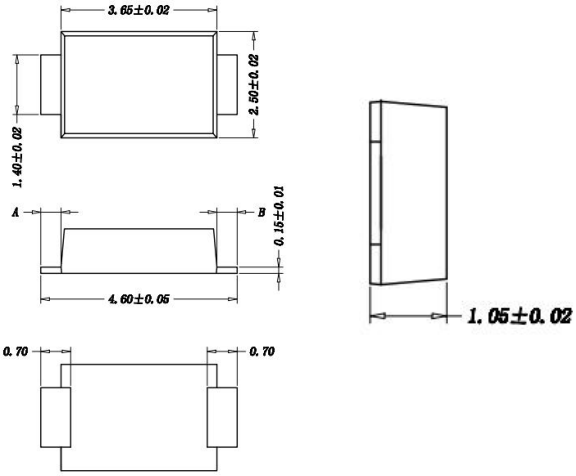
SCHOTTKY BARRIER RECTIFIERS

Datasheet

Features

- Plastic package Underwirters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier.majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- High current capacity,low V_F
- For use in low voltage high frequency inverters,free wheeling and polarity protection applications.
- High temperature soldring guaranteed:260℃/10 seconds at terminals

SMAF



Dimiensions in inches and (milimeters)

Mechanical Data

- Terminal: Plated leads, solderable per MIL-STD-750,Method 2026
- Case: molded plastic SMAF
- Polarity: Color band denotes postives end(cathode)
- Standard packaging:12mm tape(EIA-481)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive

Parameter	Symbols	SS12F	SS14F	SS16F	SS18F	SS110F	SS115F	SS120F	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current	IF(AV)	1.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 2 A	V_F	0.55		0.70	0.85		0.95		V
Maximum Instantaneous Reverse Current TA = 25°C	I_R	0.5			0.05				mA
at Rated DC Reverse Voltage TA = 120°C		50			10				
Typical Junction Capacitance (1)	Cj	65		60	30		25		pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	70							°C/W
Operating Junction Temperature Range	Tj	-55 ~ +150							°C
Storage Temperature Range	Tstg	-55 ~ +150							°C

load. For capacitive load, derate current by 20%.

Note: 1. Pulse Test with PW=300μsec,2% Duty Cycle.

2. Mounted on P.C.Board with 5.0mm2(.013mm thick)copper pad areas.

Schottky rectifier

FIG.1-FORWARD CURRENT DERATING CURVE

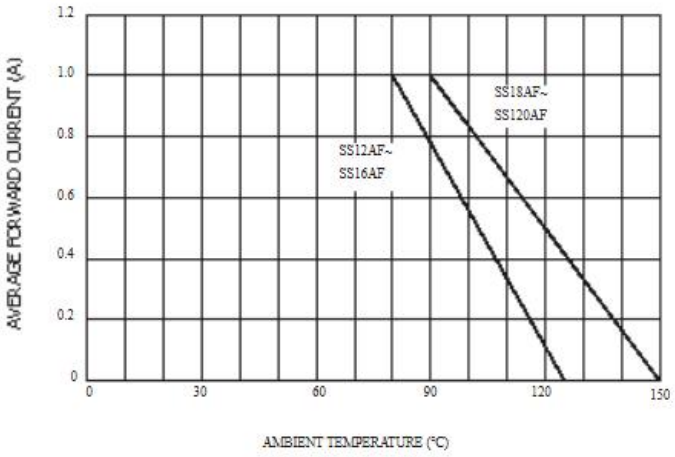


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

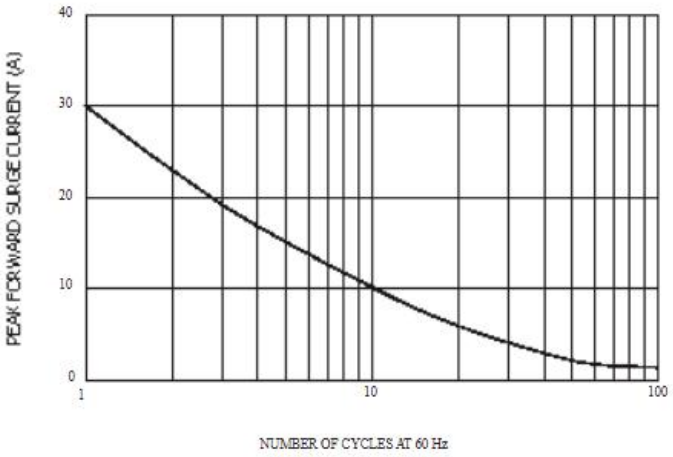


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

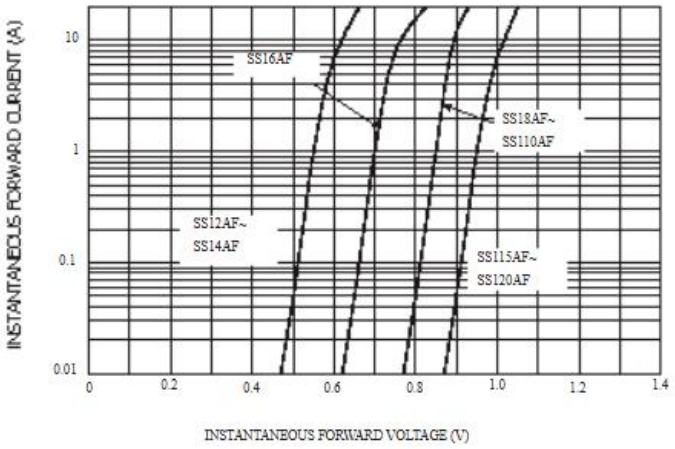


FIG.4-TYPICAL REVERSE CHARACTERISTICS