

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE: 20 to 200 VOLTS

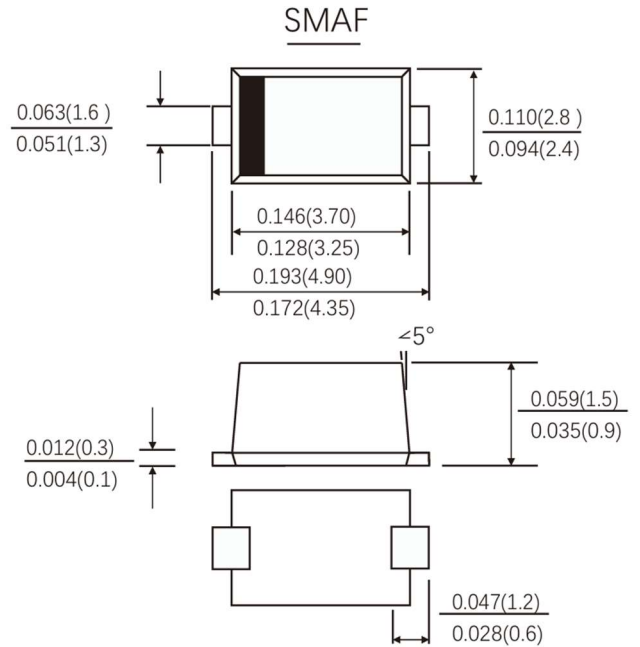
FORWARD CURRENT: 1.0 AMPERE

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- For surface mounted applications
- High current capability, Low forward voltage drop
- High temperature soldering guaranteed:
260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

Mechanical Data

- Case: SMAF molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
- Tape Reel: 3000pcs



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%.

Parameters / Marking Code	Symbols	SS12S	SS13S	SS14S	SS16S	SS110S	SS115S	SS120S	Units	
Maximum repetitive peak reverse voltage	VRRM	20	30	40	60	100	150	200	Volts	
Maximum RMS voltage	VRMS	14	21	28	42	71	105	140	Volts	
Maximum DC blocking voltage	VDC	20	30	40	60	100	150	200	Volts	
Maximum average forward rectified current (See Fig. 1)	I(AV)	1.0							Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	40.0							Amps	
Maximum instantaneous forward voltage at 1.0 A (note 1)	VF	0.55			0.75	0.85	0.90	0.95	Volts	
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	T _J =25°C	100				20				μA
	T _J =100°C	5.0				-				mA
	T _J =125°C	-				3.0				mA
Typical thermal resistance (Note 2)	Junction-Ambient	RθJA							150	°C/W
	Junction-Mount	RθJM							15	°C/W
Operating junction temperature range	T _J	-55 to +150							°C	
Storage temperature range	T _{STG}	-55 to +150							°C	

NOTES:

1. Pulse test: 300μs pulse width, 1% duty cycle
2. Thermal resistance junction-to-ambient to follow JEDEC51-2A, device mounted on FR4 PCB, 2 oz., standard footprint
Thermal resistance junction-to-mount to follow JEDEC51-14 transient dual interface test method (TDIM)

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

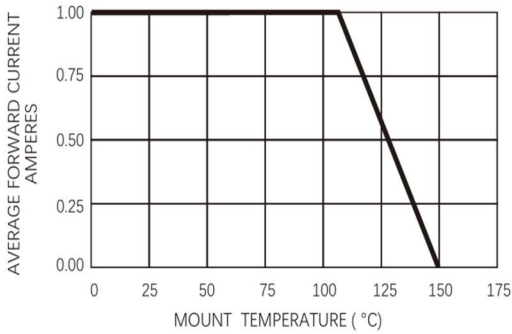


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

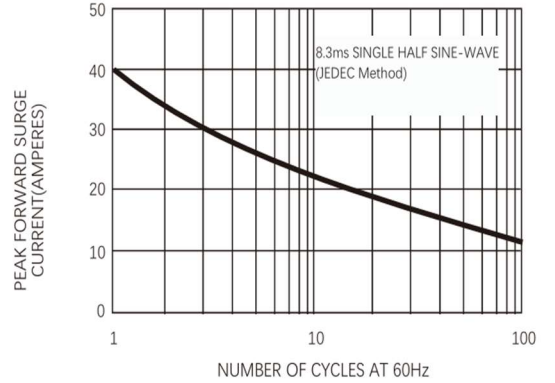


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

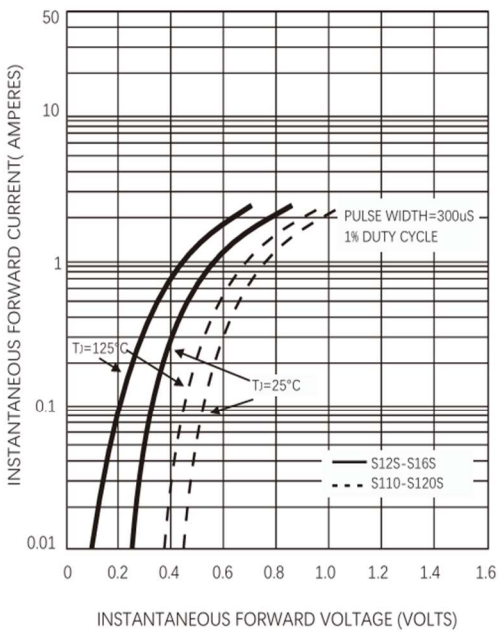


FIG.4-TYPICAL REVERSE CHARACTERISTICS

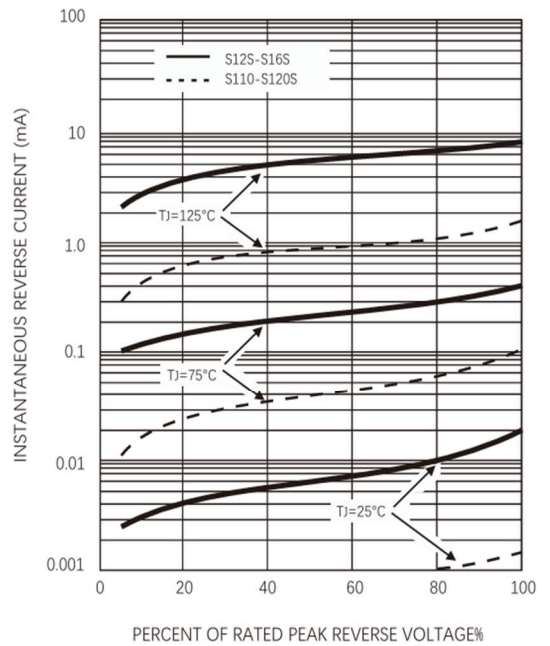


FIG.5-TYPICAL JUNCTION CAPACITANCE

