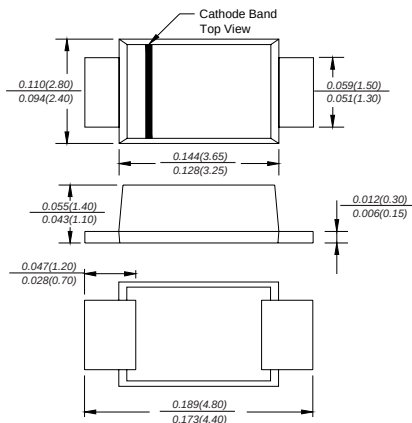


SS12AF THRU SS120AF

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 1.0 Ampere

SMAF



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SMAF molded plastic body

Terminals: leads solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0014 ounce, 0.038 grams

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 current derate by 20%.

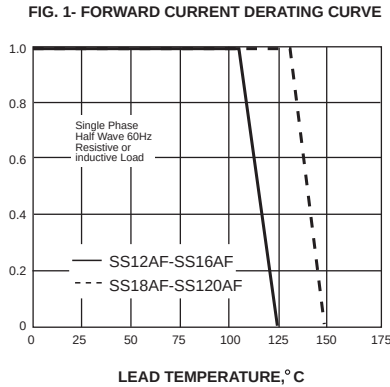
	SYMBOLS	SS12AF	SS13AF	SS14AF	SS15AF	SS16AF	SS18AF	SS110AF	SS115AF	SS120AF	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	VOLTS
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum average forward rectified current at 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}	30.0									Amps
Maximum instantaneous forward voltage at 1.0A	V _F	0.45	0.55	0.70		0.85			0.95	Volts	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5						0.2		mA	
		10.0				5.0		2.0			
Typical junction capacitance (NOTE 1)	C _J	110			90						pF
Typical thermal resistance (NOTE 2)	R _{θJA}	95									°C/W
Operating junction temperature range	T _J	-55 to +125					-55 to +150				°C
Storage temperature range	T _{STG}	-55 to +150									°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

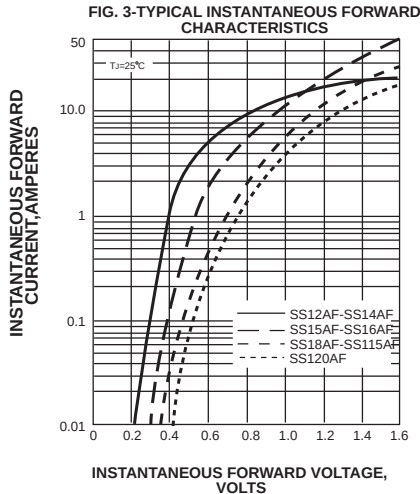
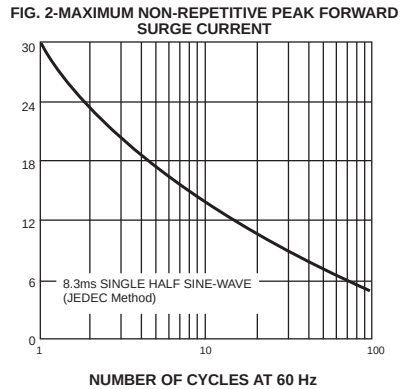
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS12AF THRU SS120AF

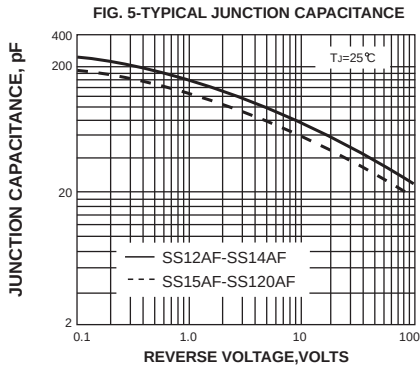
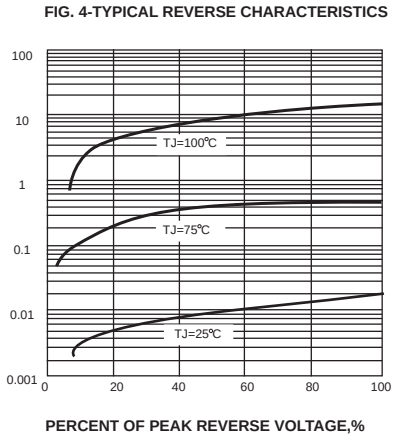
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



PEAK FORWARD SURGE CURRENT,
AMPERES



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES



TRANSIENT THERMAL IMPEDANCE,
°C/W

