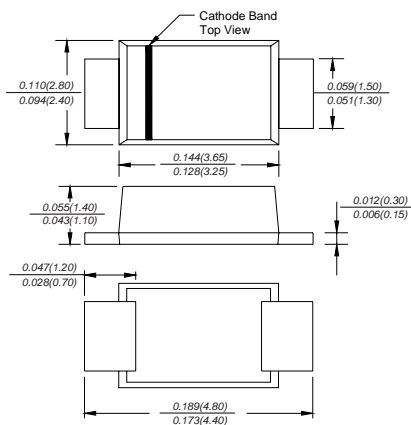


SS32AF THRU SS320AF

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 3.0 Amperes

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: 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%.

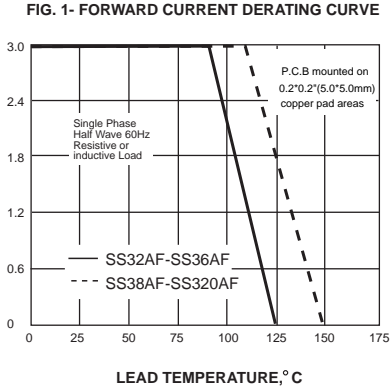
	SYMBOLS	SS32AF	SS33AF	SS34AF	SS35AF	SS36AF	SS38AF	SS310AF	SS315AF	SS320AF	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	150	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current at T_L (see fig. 1)	$I_{(AV)}$	3.0									A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	70.0									A	
Maximum instantaneous forward voltage at 3.0A	V_F	0.55			0.70		0.85		0.95		V	
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5				0.1			2.0		mA	
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		20				10						
Typical junction capacitance (NOTE 1)	C_J	500			300						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	80.0									°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.

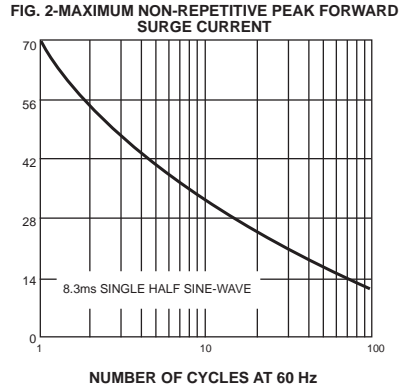
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS32AF THRU SS320AF

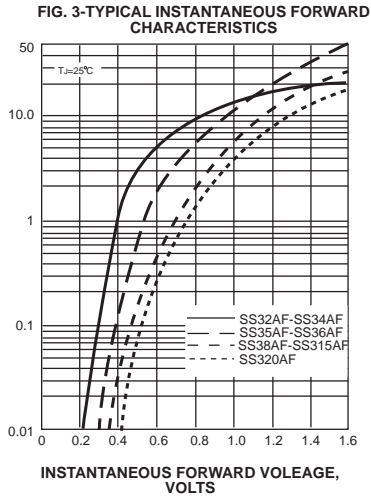
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



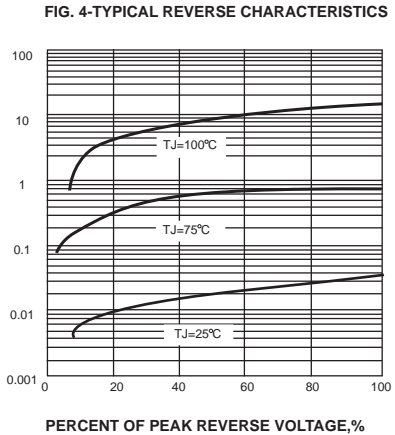
PEAK FORWARD SURGE CURRENT, AMPERES



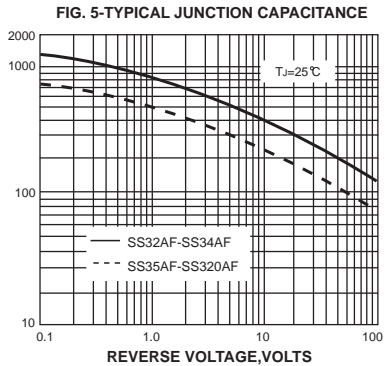
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

