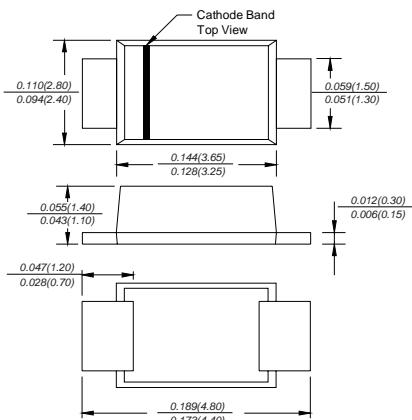


# SS52AF THRU SS520AF

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts    Forward Current - 5.0 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:** 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%.

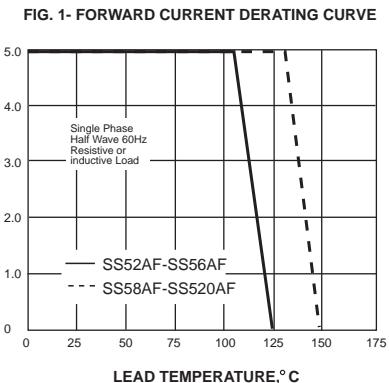
	SYMBOLS	SS52AF	SS53AF	SS54AF	SS55AF	SS56AF	SS58AF	SS510AF	SS515AF	SS520AF	UNITS								
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	VOLTS								
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	150	VOLTS								
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	VOLTS								
Maximum average forward rectified current at T <sub>L</sub> (see fig.1)	I <sub>(AV)</sub>	5.0								Amps									
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150.0								Amps									
Maximum instantaneous forward voltage at 5.0A	V <sub>F</sub>	0.55		0.70		0.85		0.95		Volts									
Maximum DC reverse current    T <sub>A</sub> =25°C at rated DC blocking voltage    T <sub>A</sub> =100°C	I <sub>R</sub>	0.5				0.2				mA									
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	200								pF									
		80.0								°C/W									
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	-55 to +125				-55 to +150				°C									
Operating junction temperature range	T <sub>J</sub>	-55 to +150								°C									
Storage temperature range	T <sub>STG</sub>	-55 to +150								°C									

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

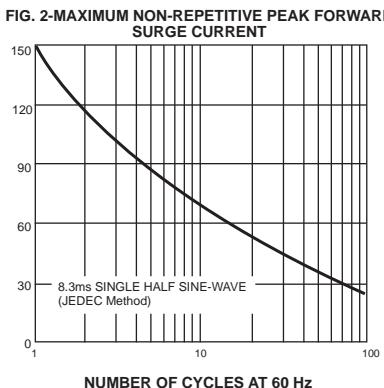
2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SS52AF THRU SS520AF

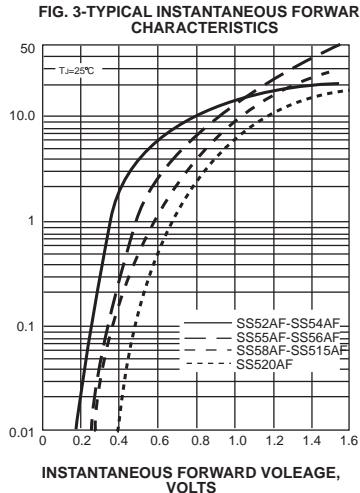
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES



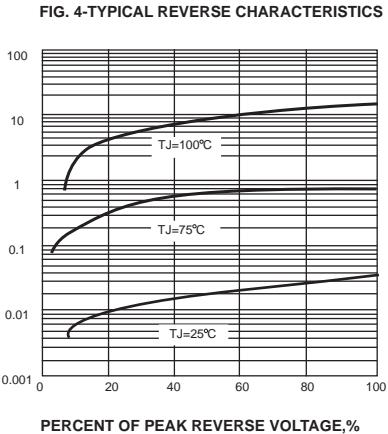
PEAK FORWARD SURGE CURRENT,  
AMPERES



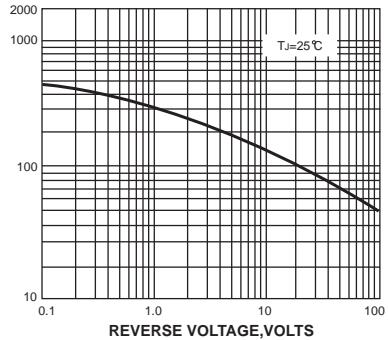
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT,  
MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE,  
°C/W

