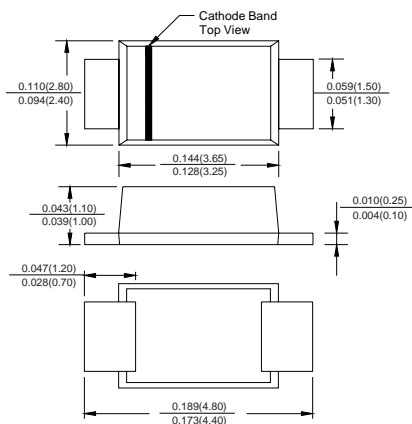


SS32AS THRU SS320AS

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

SMAS



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: SMAS molded plastic body

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.0011 ounce, 0.029 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%.

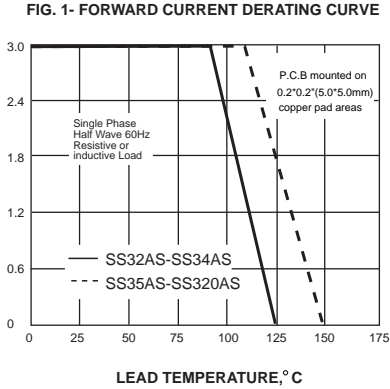
	SYMBOLS	SS32AS	SS33AS	SS34AS	SS35AS	SS36AS	SS38AS	SS310AS	SS315AS	SS320AS	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	150	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum average 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 $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	0.5				0.1			2.0		mA	
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.

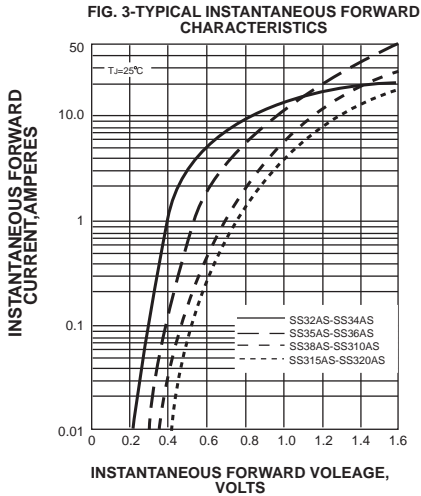
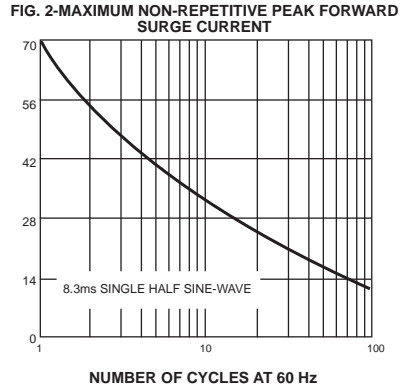
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS32AS THRU SS320AS

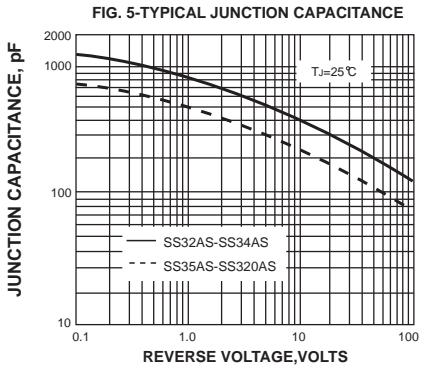
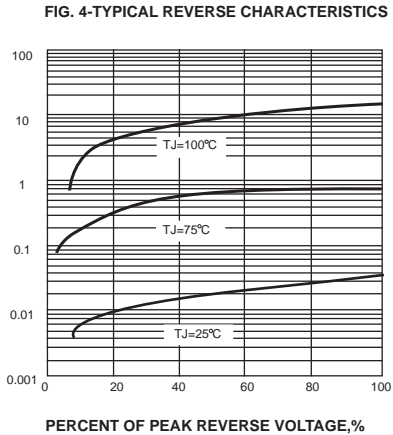
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



PEAK FORWARD SURGE CURRENT,
AMPERES



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES



TRANSIENT THERMAL IMPEDANCE,
°C/W

