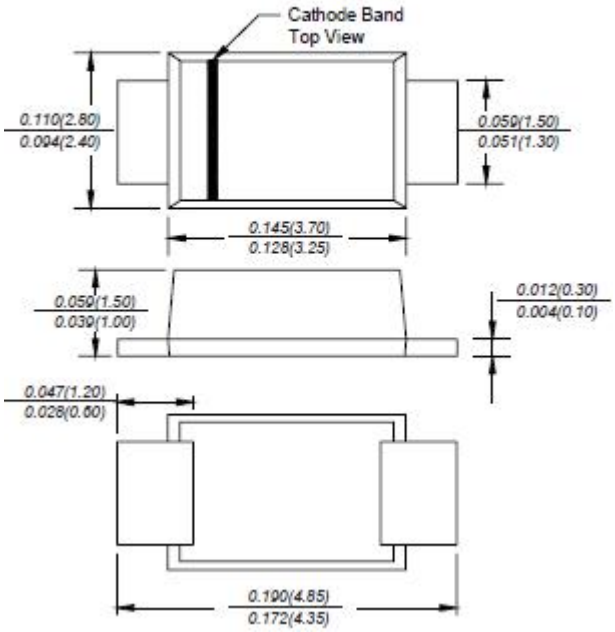
SS32F thru SS320F

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250 C/10 seconds at terminals

Mechanical Data

- Case: JEDEC SMAF molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight : 0.0014 ounce, 0.038 grams



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25 C ambient te mperature unless otherwise speci fied. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	SS32AF SK32AF	SS33AF SK33AF	SS34AF SK34AF	SS35AF SK35AF	SS36AF SK36AF	SS38AF SK38AF	SS310AF SK310AF	SS3150AF SK3150AF	SS320AF SK320AF	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	150	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)	$I_{(AV)}$	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100.0									Amps
Maximum instantaneous forward voltage at 3.0A	V_F	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
		20					10		2.0		
Typical junction capacitance (NOTE 1)	C_J	500			300						pF
Typical thermal resistance (NOTE 2)	R_{qJA}	55.0									℃/W
Operating junction temperature range	$T_{J,}$	-65 to +125					-65 to +150				℃
Storage temperature range	T_{STG}	-65 to +150									℃

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

FIG. 1- FORWARD CURRENT DERATING CURVE

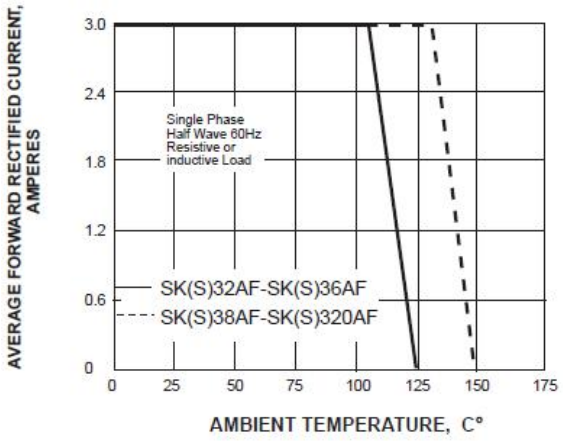


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

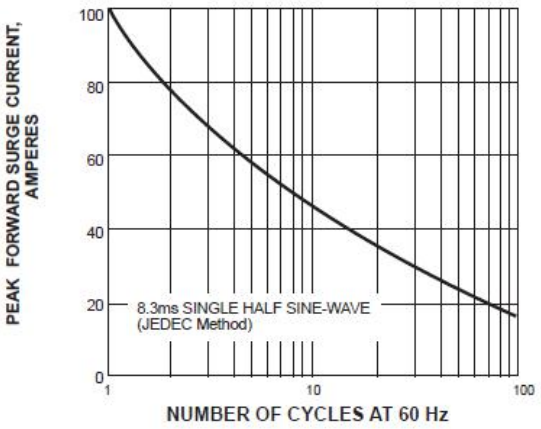


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

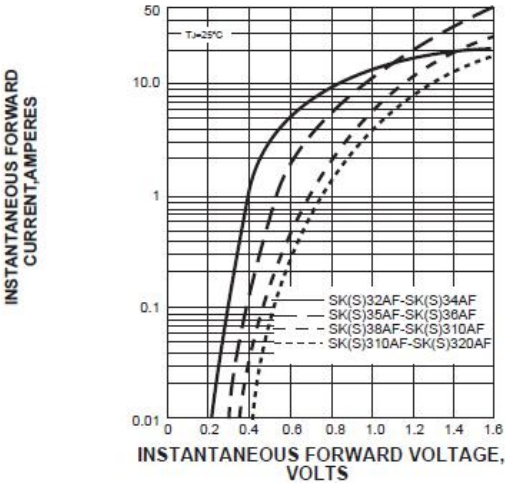


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

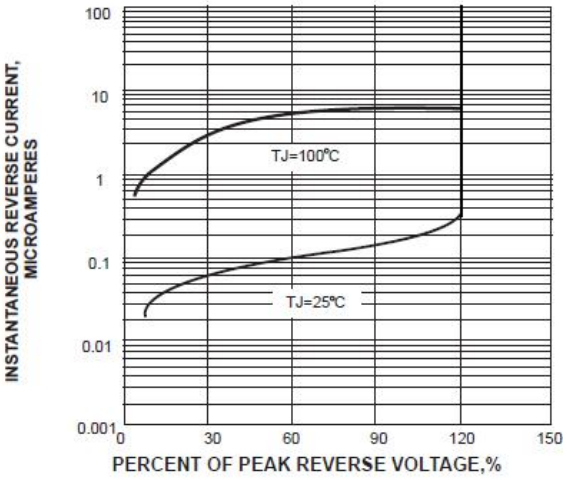


FIG. 5-TYPICAL JUNCTION CAPACITANCE

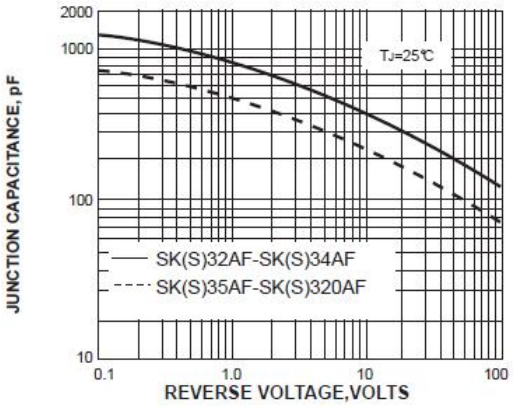


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE