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SK32AF-SK320AF SCHOTTKY RECTIFIER

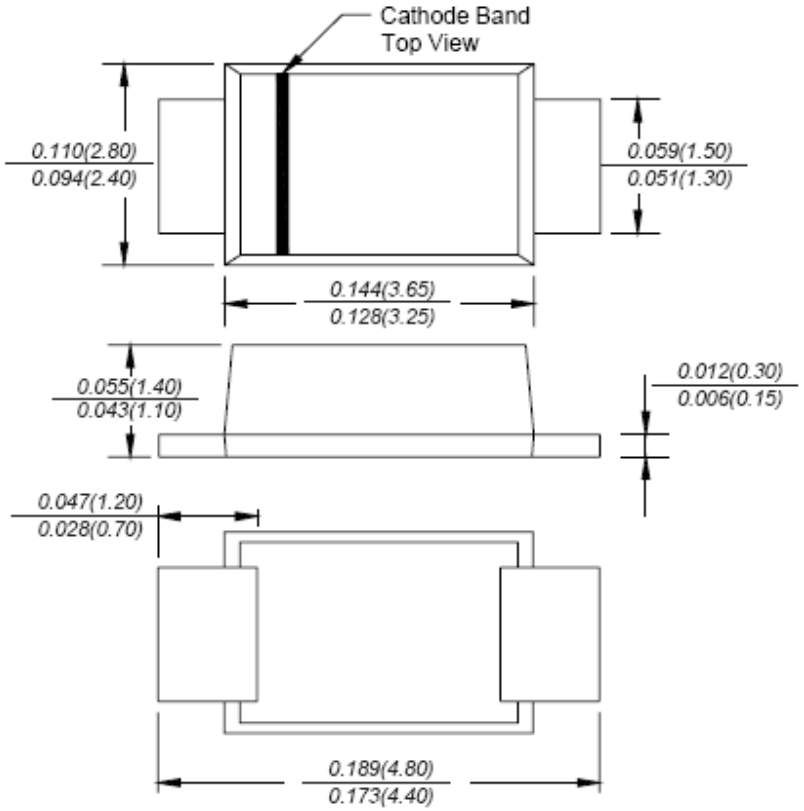
Features:

- **Schottky Barrier Rectifier**
- **Guard Ring Die Protection**
- **Low Forward Voltage**
- **Reverse Energy Tested**
- **High Current Capability**
- **Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0**
- **This is a Pb − Free Device**
- **All SMC parts are traceable to the wafer lot**
- **Additional testing can be offered upon request**

Mechanical Data:

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

Mechanical Dimensions (In Inches/mm)



SMAF

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Marking Diagram:

Where XXXXX is YYWWL
YYWWL date code marked on box.

SK32AF = Part Name
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL: 94V-0

Ordering Information:

Device	Package	Shipping
SK32AF-SK320AF	SMAF (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SK32 AF	SK33 AF	SK34 AF	SK35 AF	SK36 AF	SK38 AF	SK310 AF	SK315 AF	SK320 AF	Unit
Maximum Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	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 Average Forward Rectified Current at T_L (see fig.1)	$I_{F(AV)}$	3.0									A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	80									A
Maximum Instantaneous Forward Voltage @ I_F = 3.0A, T_J = 25°C	V_F	0.55			0.70		0.85			0.95	V
Maximum DC Reverse Current @T_J = 25°C	I_R	0.5							0.2		mA
At Rated DC Blocking Voltage @T_J = 100°C		20					10		2.0		
Typical Junction Capacitance	C_J	500			300						pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	80									°C/W
Operating Temperature Range	T_J	-55 to +125					-55 to +150				°C
Storage Temperature Range	T_{STG}	-55 to +150									°C
Case Style	SMAF										

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

FIG. 1- FORWARD CURRENT DERATING CURVE

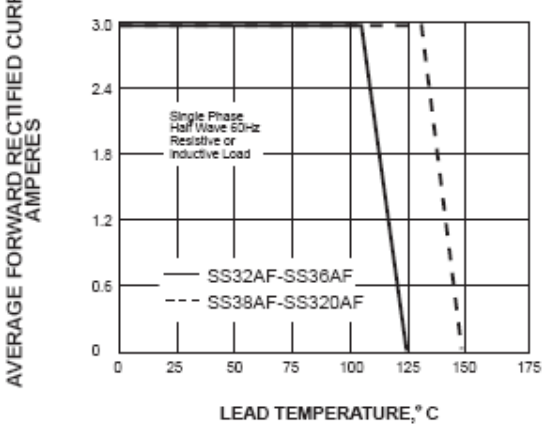


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

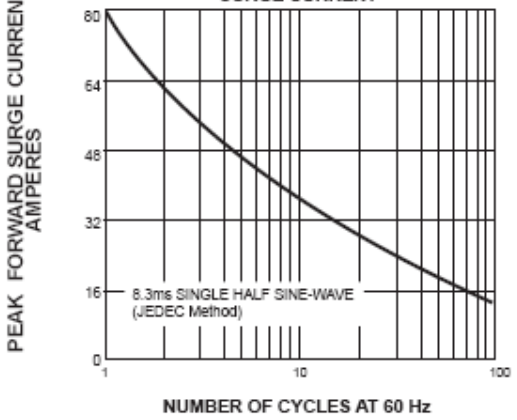


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

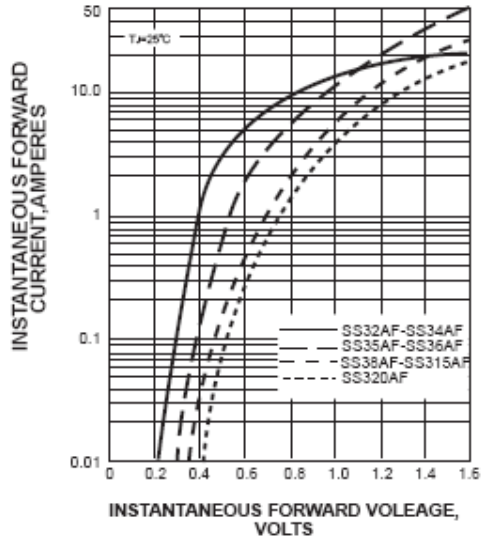


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

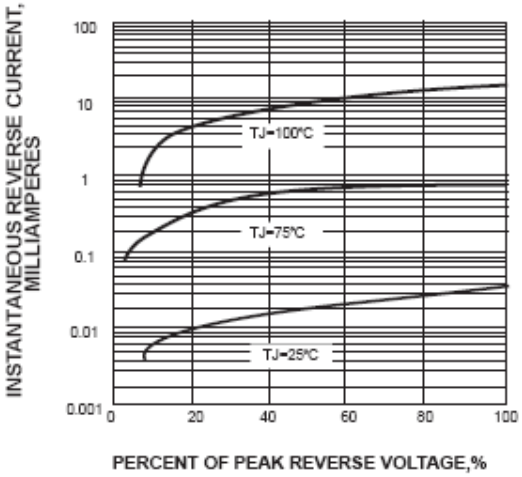


FIG. 5-TYPICAL JUNCTION CAPACITANCE

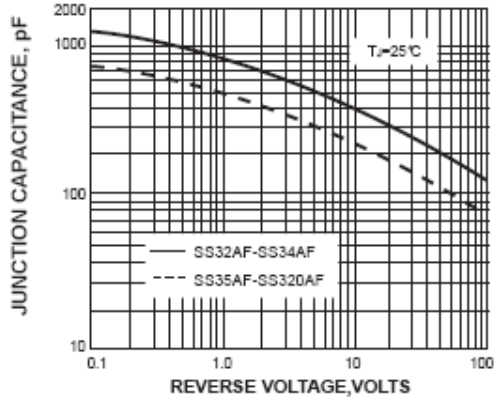
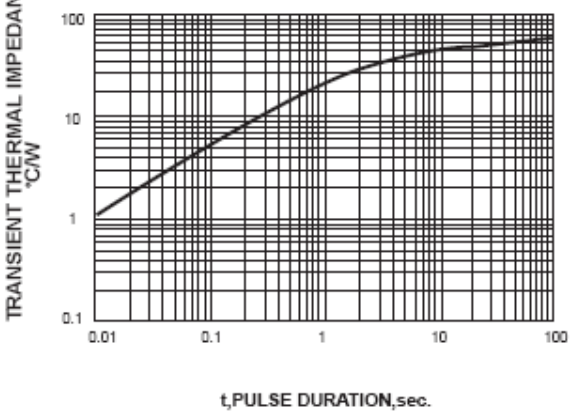


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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