Technical Data
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SS32AF THRU SS320AF SCHOTTKY RECTIFIER

SMAF

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

Circuit Diagram

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

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

Characteristic	Symbol	SS32 AF	SS33 AF	SS34 AF	SS35 AF	SS36 AF	SS38 AF	SS310 AF	SS315 AF	SS320 AF	Units
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}	70									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 At Rated DC Blocking Voltage @T_J = 100°C	I_R	0.5					0.1				mA
		20					10		2.0		
Typical Junction Capacitance(Note 1)	C_J	500			300						pF
Typical Thermal Resistance Junction to Ambient(Note 2)	$R_{\theta JA}$	80									°C/W
Operating Temperature Range	T_J	-55 to +125					-55 to +150				°C
Storage Temperature Range	T_{STG}	-55 to +150									°C

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

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Ratings and Characteristics Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

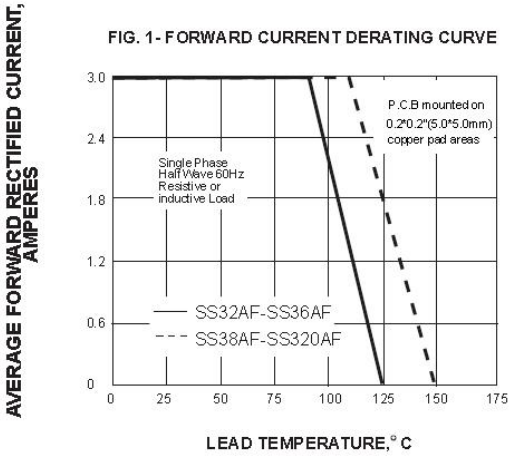


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

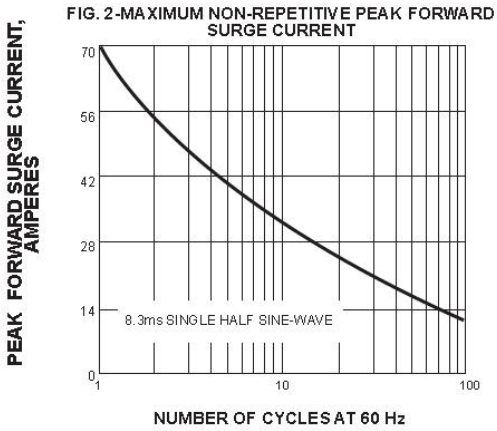


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

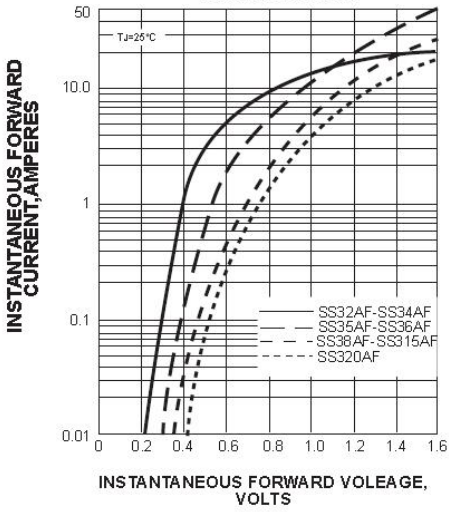


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

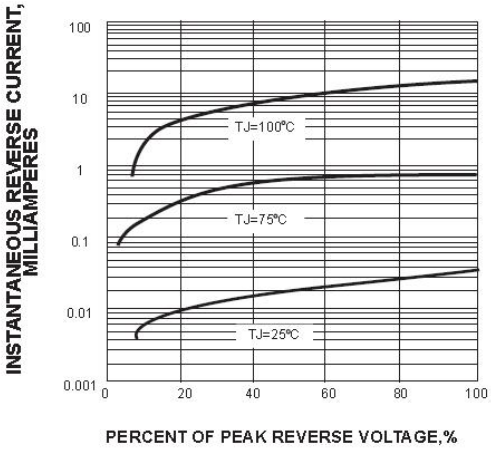


FIG. 5-TYPICAL JUNCTION CAPACITANCE

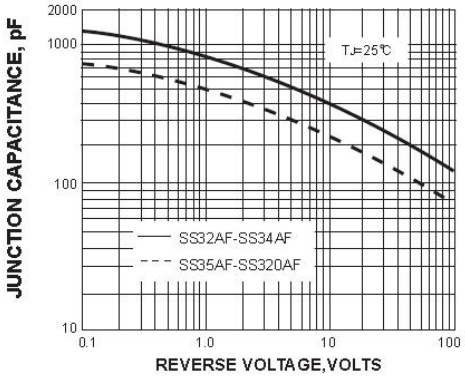
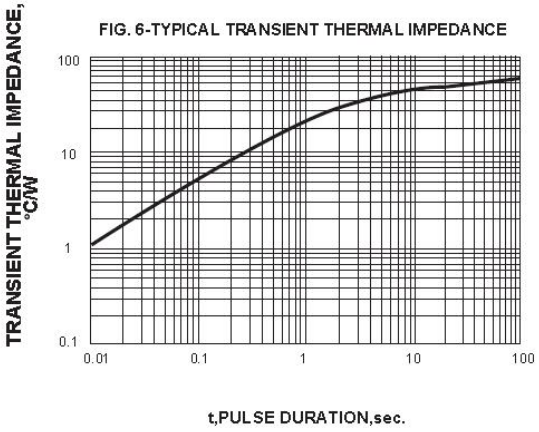


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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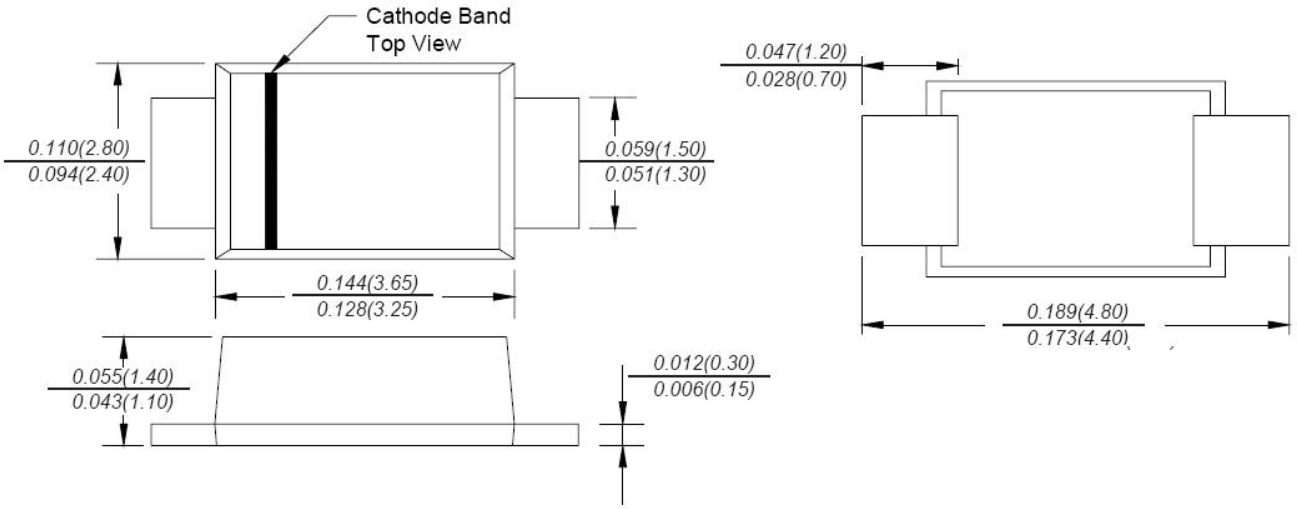
Mechanical Dimensions SMAF(Millimeters/Inches)

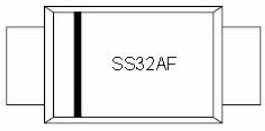


Ordering Information

Device	Package	Shipping
SS32AF THRU SS320AF	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.

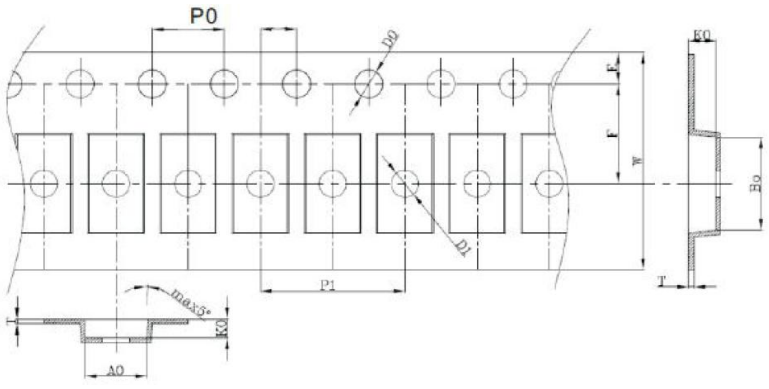
Marking Diagram



Where XXXXX is YYWWL
YYWWL date code marked on box.

SS32AF = Part Name
YY = Year
WW = Week
L = Lot Number

Carrier Tape Specification SMAF



SYMBOL	Millimeters	
	Min.	Max.
A0	2.83	3.03
B0	2.23	5.43
K0	1.23	1.43
P0	3.90	4.10
P1	3.90	4.10
P2	1.90	2.10
T	0.17	0.23
E	1.63	1.83
F	5.45	5.65
D0	1.50	1.60
D1	1.45	1.55
W	11.70	12.30

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