Technical Data
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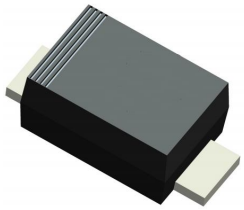
R1A-R1M 1.0AMP SURFACE MOUNT GLASS FAST RECOVERY RECTIFIER



SMAF

Features

- Fast switching for high efficiency
- Low Power Loss, High Efficiency
- High current capability
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classication 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

Type Number	Symbol	R1A	R1B	R1D	R1G	R1J	R1K	R1M	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average forward rectified output current @T_A = 75°C	I_O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Forward Voltage @I_F =1.0A	V_F	1.3							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	5.0 150							μA
Maximum Reverse Recovery Time (Note 1)	Trr	150				250	500		ns
Typical Junction Capacitance (Note 2)	C_J	12							pF
Typical Thermal Resistance Junction to Ambient (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	100 32							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C

Note: 1.Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A.
2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
3. 8.0mm²(.013mm thick) land areas.

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RoHS

Ratings and Characteristics Curves

FIG.1MAXIMUM AVERAGE FORWARD CURRENT DERATING

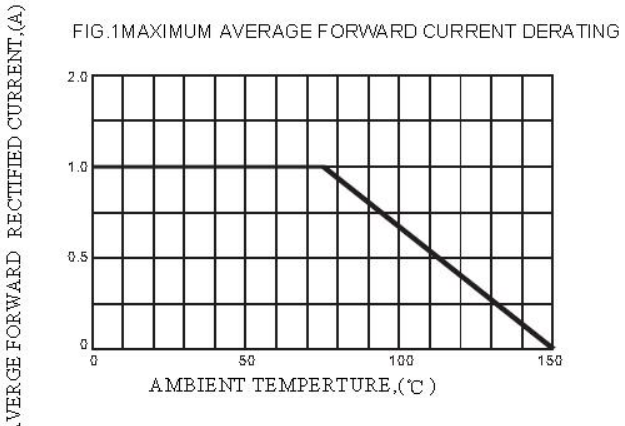


FIG.2TYPICAL FORWARD CHARACTERISTICS

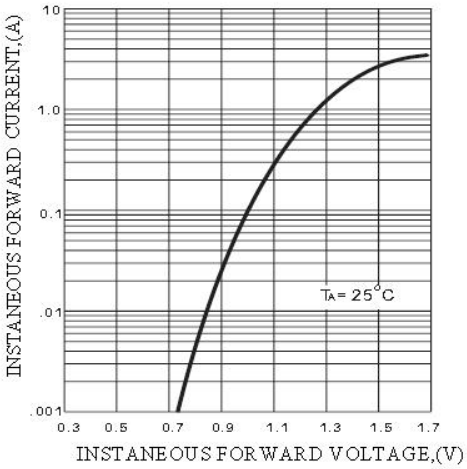


FIG.3MAXIMUM NON-REPEITIVE SURGE CURRENT

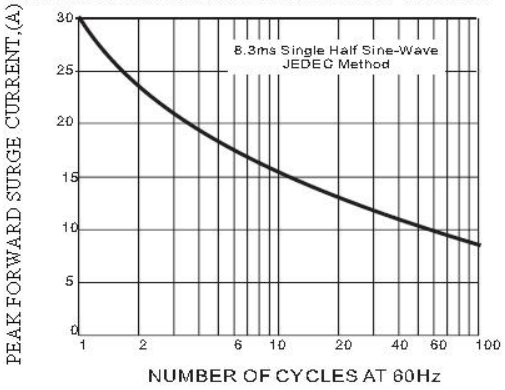


FIG.4TYPICAL JUNCTION CAPACITANCE

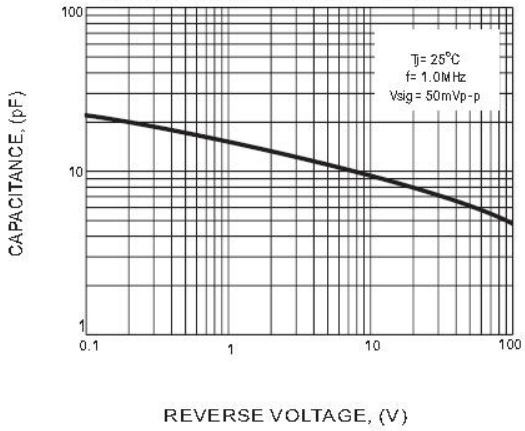
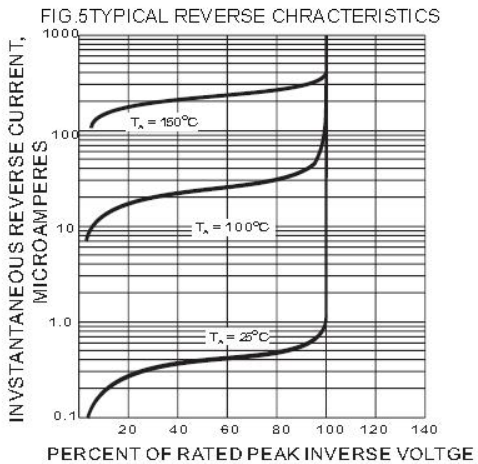


FIG.5TYPICAL REVERSE CHRACTERISTICS



R1A
THRU
R1M

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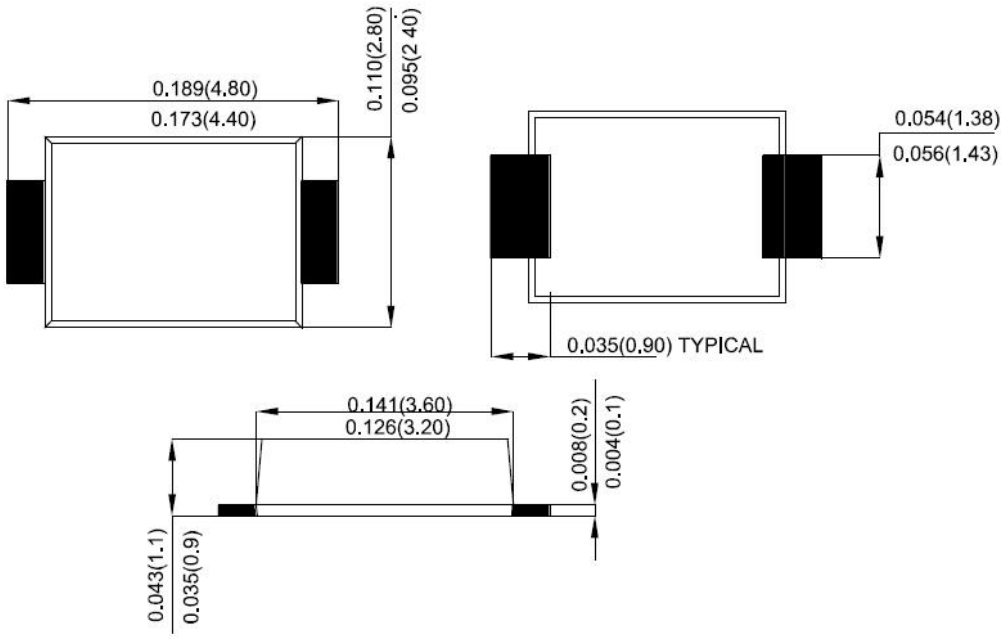
Mechanical Dimensions SMAF(Millimeters/Inches)



Ordering Information

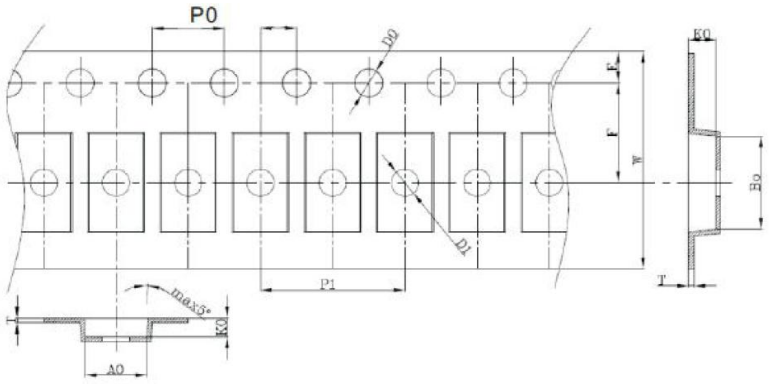
Device	Package	Shipping
R1A THRU R1M	SMAF (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

R1A = Type 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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