

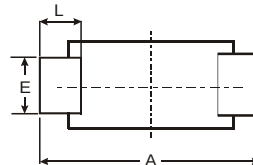
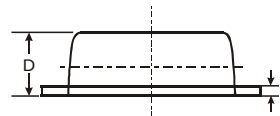
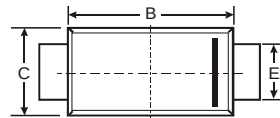
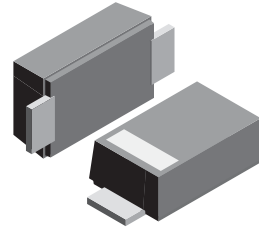
VOLTAGE RANGE: 3.3 - 240V
POWER: 1.5Watts

Features

- Complete Voltage Range 3.3 to 240 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case: SMAF, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0018 ounce, 0.064 grams

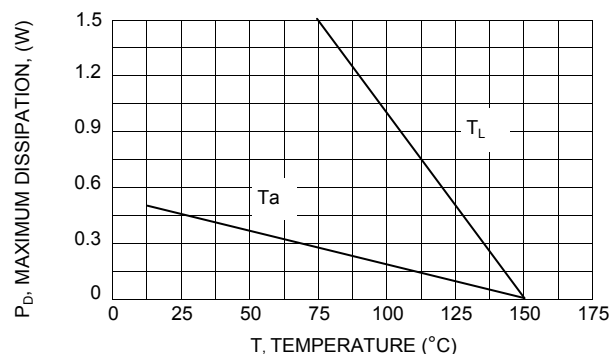


SMAF			
Dim	Min	Max	Typ
A	4.75	4.85	4.80
B	3.68	3.72	3.70
C	2.57	2.63	2.60
D	0.097	1.03	1.00
E	1.38	1.42	1.40
H	0.13	0.17	0.15
L	0.63	0.67	0.65
All Dimensions in mm			

Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation @ $T_L = 75^\circ\text{C}$	P_D	1.5	W
Measured zero lead length (1" square copper pad, FR-4 board) Derate above 75°C		20	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Lead	$R_{\theta JL}$	50	$^\circ\text{C/W}$
DC Power Dissipation @ $T_A = 25^\circ\text{C}$	P_D	0.5	W
(FR-4 board) Derate above 25°C		4.0	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	$^\circ\text{C/W}$
Maximum Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.5	V
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 65 to + 150	$^\circ\text{C}$

Fig. 1 POWER TEMPERATURE DERATING CURVE



ELECTRICAL CHARACTERISTICS Rating at 25 °C ambient temperature unless otherwise specified

TYPE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	Vz @ IzT	IzT	ZzT @ IzT	Zzk @ IzK	IzK	Ir @ Vr		IzM
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
1SMAF5913A	3.3	113.6	10	500	1.0	100	1.0	
1SMAF5914A	3.6	104.2	9.0	500	1.0	75	1.0	416
1SMAF5915A	3.9	96.1	7.5	500	1.0	25	1.0	384
1SMAF5916A	4.3	87.2	6.0	500	1.0	5.0	1.0	348
1SMAF5917A	4.7	79.8	5.0	500	1.0	5.0	1.5	319
1SMAF5918A	5.1	73.5	4.0	350	1.0	5.0	2.0	294
1SMAF5919A	5.6	66.9	2.0	250	1.0	5.0	3.0	267
1SMAF5920A	6.2	60.5	2.0	200	1.0	5.0	4.0	241
1SMAF5921A	6.8	55.1	2.5	200	1.0	50	5.2	220
1SMAF5922A	7.5	50.0	3.0	400	0.5	50	6.0	200
1SMAF5923A	8.2	45.7	3.5	400	0.5	50	6.5	182
1SMAF5924A	9.1	41.2	4.0	500	0.5	50	7.0	164
1SMAF5925A	10	37.5	4.5	500	0.25	50	8.0	150
1SMAF5926A	11	34.1	5.5	550	0.25	50	8.4	136
1SMAF5927A	12	31.2	6.5	550	0.25	1.0	9.1	125
1SMAF5928A	13	28.8	7.0	550	0.25	1.0	9.9	115
1SMAF5929A	15	25.0	9.0	600	0.25	1.0	11.4	100
1SMAF5930A	16	23.4	10	600	0.25	1.0	12.2	93
1SMAF5931A	18	20.8	12	650	0.25	1.0	13.7	83
1SMAF5932A	20	18.7	14	650	0.25	1.0	15.2	75
1SMAF5933A	22	17.0	17.5	650	0.25	1.0	16.7	68
1SMAF5934A	24	15.6	19	700	0.25	1.0	18.2	62
1SMAF5935A	27	13.9	23	700	0.25	1.0	20.6	55
1SMAF5936A	30	12.5	26	750	0.25	1.0	22.8	50
1SMAF5937A	33	11.4	33	800	0.25	1.0	25.1	45
1SMAF5938A	36	10.4	38	850	0.25	1.0	27.4	41
1SMAF5939A	39	9.6	45	900	0.25	1.0	29.7	38
1SMAF5940A	43	8.7	53	950	0.25	1.0	32.7	34
1SMAF5941A	47	8.0	67	1000	0.25	1.0	35.8	31
1SMAF5942A	51	7.3	70	1100	0.25	1.0	38.8	29
1SMAF5943A	56	6.7	86	1300	0.25	1.0	42.6	26
1SMAF5944A	62	6.0	100	1500	0.25	1.0	47.1	24
1SMAF5945A	68	5.5	120	1700	0.25	1.0	51.7	22
1SMAF5946A	75	5.0	140	2000	0.25	1.0	56.0	20
1SMAF5947A	82	4.6	160	2500	0.25	1.0	62.2	18
1SMAF5948A	91	4.1	200	3000	0.25	1.0	69.2	16
1SMAF5949A	100	3.7	250	3100	0.25	1.0	76.0	15
1SMAF5950A	110	3.4	300	4000	0.25	1.0	83.6	13
1SMAF5951A	120	3.1	380	4500	0.25	1.0	91.2	12
1SMAF5952A	130	2.9	450	5000	0.25	1.0	98.8	11
1SMAF5953A	150	2.5	600	6000	0.25	1.0	114.0	10
1SMAF5954A	160	2.3	700	6500	0.25	1.0	121.6	9.0
1SMAF5955A	180	2.1	900	7000	0.25	1.0	136.8	8.0
1SMAF5956A	200	1.9	1200	8000	0.25	1.0	152.0	7.0
1SMAF5957A	240	1.5	1600	9000	0.25	1.0	182.4	6.0

Note :

(1) Suffix " B " indicates $\pm 5\%$ tolerance suffix " A " indicates $\pm 10\%$ tolerance.