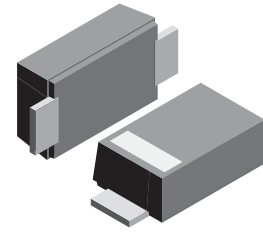


**VOLTAGE RANGE: 3.6 - 200V**  
**POWER: 2.0Watts**

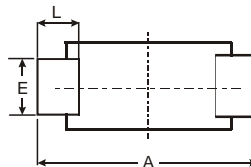
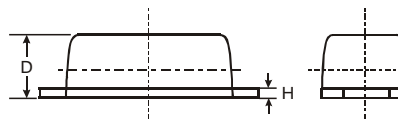
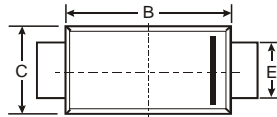
### Features

- Complete Voltage Range 3.6 to 200 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			

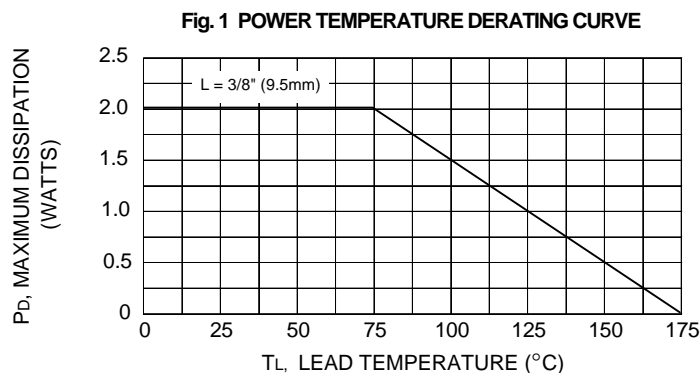
### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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

Rating	Symbol	Value	Unit
DC Power Dissipation at T <sub>L</sub> = 75 °C (Note1)	P <sub>D</sub>	2.0	Watts
Maximum Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	R <sub>θJA</sub>	60	K / W
Junction Temperature Range	T <sub>J</sub>	- 55 to + 175	°C
Storage Temperature Range	T <sub>s</sub>	- 55 to + 175	°C

**Note :**

- (1) T<sub>L</sub> = Lead temperature at 3/8 " (9.5mm) from body
- (2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.



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)
SMAF2Z3.6	3.6	139	5.0	400	1.0	80	1.0	504
SMAF2Z3.9	3.9	128	5.0	400	1.0	30	1.0	468
SMAF2Z4.3	4.3	116	4.5	400	1.0	20	1.0	434
SMAF2Z4.7	4.7	106	4.5	550	1.0	5.0	1.0	386
SMAF2Z5.1	5.1	98.0	3.5	600	1.0	5.0	1.0	356
SMAF2Z5.6	5.6	89.5	2.5	500	1.0	5.0	2.0	324
SMAF2Z6.2	6.2	80.5	1.5	700	1.0	5.0	3.0	292
SMAF2Z6.8	6.8	73.5	2.0	700	1.0	5.0	4.0	266
SMAF2Z7.5	7.5	66.5	2.0	700	0.5	50	5.0	242
SMAF2Z8.2	8.2	61.0	2.3	700	0.5	50	6.0	220
SMAF2Z9.1	9.1	55.0	2.5	700	0.5	50	7.0	200
SMAF2Z10	10	50.0	3.5	700	0.25	50	7.6	182
SMAF2Z11	11	45.5	4.0	700	0.25	50	8.4	166
SMAF2Z12	12	41.5	4.5	700	0.25	1.0	9.1	152
SMAF2Z13	13	38.5	5.0	700	0.25	0.5	9.9	138
SMAF2Z14	14	35.7	5.5	700	0.25	0.5	10.6	130
SMAF2Z15	15	33.4	7.0	700	0.25	0.5	11.4	122
SMAF2Z16	16	31.2	8.0	700	0.25	0.5	12.2	114
SMAF2Z17	17	29.4	9.0	750	0.25	0.5	13.0	107
SMAF2Z18	18	27.8	10	750	0.25	0.5	13.7	100
SMAF2Z19	19	26.3	11	750	0.25	0.5	14.4	95
SMAF2Z20	20	25.0	11	750	0.25	0.5	15.2	90
SMAF2Z22	22	22.8	12	750	0.25	0.5	16.7	82
SMAF2Z24	24	20.8	13	750	0.25	0.5	18.2	76
SMAF2Z27	27	18.5	18	750	0.25	0.5	20.6	68
SMAF2Z30	30	16.6	20	1000	0.25	0.5	22.5	60
SMAF2Z33	33	15.1	23	1000	0.25	0.5	25.1	55
SMAF2Z36	36	13.9	25	1000	0.25	0.5	27.4	50
SMAF2Z39	39	12.8	30	1000	0.25	0.5	29.7	47
SMAF2Z43	43	11.6	35	1500	0.25	0.5	32.7	43
SMAF2Z47	47	10.6	40	1500	0.25	0.5	35.8	39
SMAF2Z51	51	9.8	48	1500	0.25	0.5	38.8	36
SMAF2Z56	56	9.0	55	2000	0.25	0.5	42.6	32
SMAF2Z62	62	8.1	60	2000	0.25	0.5	47.1	29
SMAF2Z68	68	7.4	75	2000	0.25	0.5	51.7	27
SMAF2Z75	75	6.7	90	2000	0.25	0.5	56.0	24
SMAF2Z82	82	6.1	100	3000	0.25	0.5	62.2	22
SMAF2Z91	91	5.5	125	3000	0.25	0.5	69.2	20
SMAF2Z100	100	5.0	175	3000	0.25	0.5	76.0	18
SMAF2Z110	110	4.5	250	4000	0.25	0.5	83.6	17
SMAF2Z120	120	4.2	325	4500	0.25	0.5	91.2	15
SMAF2Z130	130	3.8	400	5000	0.25	0.5	98.8	14
SMAF2Z140	140	3.6	500	5500	0.25	0.5	106.4	13
SMAF2Z150	150	3.3	575	6000	0.25	0.5	114.0	12
SMAF2Z160	160	3.1	650	6500	0.25	0.5	121.6	11
SMAF2Z170	170	2.9	675	7000	0.25	0.5	130.4	11
SMAF2Z180	180	2.8	725	7000	0.25	0.5	136.8	10
SMAF2Z190	190	2.6	825	8000	0.25	0.5	144.8	10
SMAF2Z200	200	2.5	900	8000	0.25	0.5	152.0	9.0

**Note :**

- ( 1 ) Suffix " 5 " indicates  $\pm 5.0\%$  tolerance, suffix " 10 " indicates  $\pm 10.0\%$  tolerance.
- ( 2 ) " EZ " will be omitted in marking on the diode