

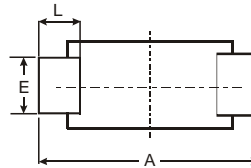
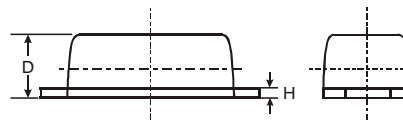
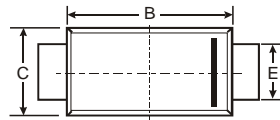
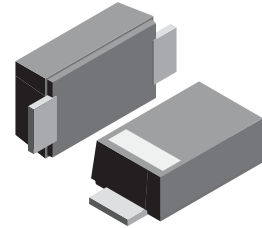
**VOLTAGE RANGE: 3V9 - 400V**  
**POWER: 3.0Watts**

### Features

- Complete Voltage Range 3.9 to 400 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 at $T_L = 75^\circ\text{C}$ (Note1)	$P_D$	3.0	Watts
Maximum Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1.5	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\theta JA}$	60	K / W
Junction Temperature Range	$T_J$	- 55 to + 175	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 55 to + 175	$^\circ\text{C}$

**Note :**

- (1)  $T_L$  = 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.



## 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 @ I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub>		I <sub>ZM</sub>
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
Z3SMAF3V9	3.9	192	4.5	400	1.0	80	1.0	630
Z3SMAF4V3	4.3	174	4.5	400	1.0	30	1.0	590
Z3SMAF4V7	4.7	160	4.0	500	1.0	20	1.0	550
Z3SMAF5V1	5.1	147	3.5	550	1.0	5.0	1.0	520
Z3SMAF5V6	5.6	134	2.5	600	1.0	5.0	2.0	480
Z3SMAF6V2	6.2	121	1.5	700	1.0	5.0	3.0	435
Z3SMAF6V8	6.8	110	2.0	700	1.0	50	4.0	393
Z3SMAF7V5	7.5	100	2.0	700	0.5	50	5.0	360
Z3SMAF8V2	8.2	91	2.3	700	0.5	50	6.0	330
Z3SMAF9V1	9.1	82	2.5	700	0.5	50	7.0	297
Z3SMAF10	10	75	3.5	700	0.3	50	7.6	270
Z3SMAF11	11	68	4.0	700	0.25	50	8.4	225
Z3SMAF12	12	63	4.5	700	0.25	1.0	9.1	246
Z3SMAF13	13	58	4.5	700	0.25	0.5	9.1	208
Z3SMAF14	14	53	5.0	700	0.25	0.5	10.6	193
Z3SMAF15	15	50	5.5	700	0.25	0.5	11.4	180
Z3SMAF16	16	47	5.5	700	0.25	0.5	12.2	169
Z3SMAF17	17	44	6.0	750	0.25	0.5	13.0	159
Z3SMAF18	18	42	6.0	750	0.25	0.5	13.7	150
Z3SMAF19	19	40	7.0	750	0.25	0.5	14.4	142
Z3SMAF20	20	37	7.0	750	0.25	0.5	15.2	135
Z3SMAF22	22	34	8.0	750	0.25	0.5	16.7	123
Z3SMAF24	24	31	9.0	750	0.25	0.5	18.2	112
Z3SMAF27	27	28	10	750	0.25	0.5	20.6	100
Z3SMAF28	28	27	12	750	0.25	0.5	21.0	96
Z3SMAF30	30	25	16	1000	0.25	0.5	22.5	90
Z3SMAF33	33	23	20	1000	0.25	0.5	25.1	82
Z3SMAF36	36	21	22	1000	0.25	0.5	27.4	75
Z3SMAF39	39	19	28	1000	0.25	0.5	29.7	69
Z3SMAF43	43	17	33	1500	0.25	0.5	32.7	60
Z3SMAF47	47	16	38	1500	0.25	0.5	35.6	57
Z3SMAF51	51	15	45	1500	0.25	0.5	38.8	53
Z3SMAF56	56	13	50	2000	0.25	0.5	42.6	48
Z3SMAF62	62	12	55	2000	0.25	0.5	47.1	44
Z3SMAF68	68	11	70	2000	0.25	0.5	51.7	40
Z3SMAF75	75	10	85	2000	0.25	0.5	56.0	36
Z3SMAF82	82	9.1	95	3000	0.25	0.5	62.2	33
Z3SMAF91	91	8.2	115	3000	0.25	0.5	69.2	30
Z3SMAF100	100	7.5	160	3000	0.25	0.5	76.0	27



## 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)
<b>Z3SMAF110</b>	110	6.8	225	4000	0.25	0.5	83.6	25
<b>Z3SMAF120</b>	120	6.3	300	4500	0.25	0.5	91.2	22
<b>Z3SMAF130</b>	130	5.8	375	5000	0.25	0.5	98.8	21
<b>Z3SMAF140</b>	140	5.3	475	5000	0.25	0.5	106.4	19
<b>Z3SMAF150</b>	150	5.0	550	6000	0.25	0.5	114.0	18
<b>Z3SMAF160</b>	160	4.7	625	6500	0.25	0.5	121.6	17
<b>Z3SMAF170</b>	170	4.4	650	7000	0.25	0.5	130.4	16
<b>Z3SMAF180</b>	180	4.2	700	7000	0.25	0.5	136.8	15
<b>Z3SMAF190</b>	190	4.0	800	8000	0.25	0.5	144.8	14
<b>Z3SMAF200</b>	200	3.7	875	8000	0.25	0.5	152.0	13
<b>Z3SMAF220</b>	220	3.4	1600	9000	0.25	1	167.0	12
<b>Z3SMAF240</b>	240	3.1	1700	9000	0.25	1	182.0	11
<b>Z3SMAF270</b>	270	2.8	1800	9000	0.25	1	205.0	10
<b>Z3SMAF300</b>	300	2.5	1900	9000	0.25	1	228.0	9
<b>Z3SMAF330</b>	330	2.3	2200	9000	0.25	1	251.0	8
<b>Z3SMAF360</b>	360	2.1	2700	9000	0.25	1	274.0	8
<b>Z3SMAF400</b>	400	1.9	3500	9000	0.25	1	304.0	7