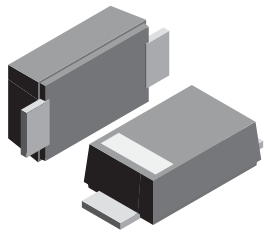
1SMAF4728A - 1SMAF4764A

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE RANGE: 3.3V - 100V
POWER: 1.0Watts



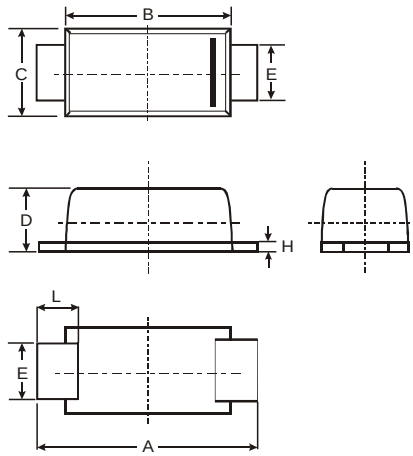
Features

- Complete voltage range 3.3 to 100 volts
- High peak reverse power dissipation
- High reliability
- Low leakage current
- Standard zener voltage tolerance is ± 5 %

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

RoHS COMPLIANT



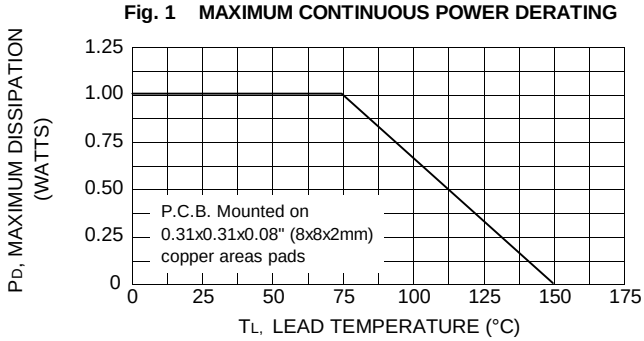
SMAF			
Dim	Min	Max	Typ
A	4.75	4.85	4.80
B	3.68	3.72	3.70
C	2.57	2.63	2.60
D	0.097	1.03	1.00
E	1.38	1.42	1.40
H	0.13	0.17	0.15
L	0.63	0.67	0.65
All Dimensions in mm			

Maximum Ratings @ T_A = 25°C unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 50 °C (Note1)	P_D	1.0	Watt
Maximum Forward Voltage at I_F = 200 mA	V_F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\theta}JA$	170	K / W
Junction Temperature Range	T_J	- 55 to + 175	°C
Storage Temperature Range	Ts	- 55 to + 175	°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.

Fig. 1 MAXIMUM CONTINUOUS POWER DERATING



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	Maximum Surge Current
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R @ V_R		I_{ZM}	I_{RM}(2)
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mApk)
1SMAF4728A	3.3	76.0	10	400	1.0	100	1.0	276	1380
1SMAF4729A	3.6	69.0	10	400	1.0	100	1.0	252	1260
1SMAF4730A	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
1SMAF4731A	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
1SMAF4732A	4.7	53.0	8.0	500	1.0	10	1.0	193	970
1SMAF4733A	5.1	49.0	7.0	550	1.0	10	1.0	178	890
1SMAF4734A	5.6	45.0	5.0	600	1.0	10	2.0	162	810
1SMAF4735A	6.2	41.0	2.0	700	1.0	10	3.0	146	730
1SMAF4736A	6.8	37.0	3.5	700	1.0	50	4.0	133	660
1SMAF4737A	7.5	34.0	4.0	700	0.5	50	5.0	121	605
1SMAF4738A	8.2	31.0	4.5	700	0.5	50	6.0	110	550
1SMAF4739A	9.1	28.0	5.0	700	0.5	50	7.0	100	500
1SMAF4740A	10	25.0	7.0	700	0.25	50	7.6	91	454
1SMAF4741A	11	23.0	8.0	700	0.25	50	8.4	83	414
1SMAF4742A	12	21.0	9.0	700	0.25	5.0	9.1	76	380
1SMAF4743A	13	19.0	10	700	0.25	5.0	9.9	69	344
1SMAF4744A	15	17.0	14	700	0.25	5.0	11.4	61	305
1SMAF4745A	16	15.5	16	700	0.25	5.0	12.2	57	285
1SMAF4746A	18	14.0	20	750	0.25	5.0	13.7	50	250
1SMAF4747A	20	12.5	22	750	0.25	5.0	15.2	45	225
1SMAF4748A	22	11.5	23	750	0.25	5.0	16.7	41	205
1SMAF4749A	24	10.5	25	750	0.25	5.0	18.2	38	190
1SMAF4750A	27	9.5	35	750	0.25	5.0	20.6	34	170
1SMAF4751A	30	8.5	40	1000	0.25	5.0	22.8	30	150
1SMAF4752A	33	7.5	45	1000	0.25	5.0	25.1	27	135
1SMAF4753A	36	7.0	50	1000	0.25	5.0	27.4	25	125
1SMAF4754A	39	6.5	60	1000	0.25	5.0	29.7	23	115
1SMAF4755A	43	6.0	70	1500	0.25	5.0	32.7	22	110
1SMAF4756A	47	5.5	80	1500	0.25	5.0	35.8	19	95
1SMAF4757A	51	5.0	95	1500	0.25	5.0	38.8	18	90
1SMAF4758A	56	4.5	110	2000	0.25	5.0	42.6	16	80
1SMAF4759A	62	4.0	125	2000	0.25	5.0	47.1	14	70
1SMAF4760A	68	3.7	150	2000	0.25	5.0	51.7	13	65
1SMAF4761A	75	3.3	175	2000	0.25	5.0	56.0	12	60
1SMAF4762A	82	3.0	200	3000	0.25	5.0	62.2	11	55
1SMAF4763A	91	2.8	250	3000	0.25	5.0	69.2	10	50
1SMAF4764A	100	2.5	350	3000	0.25	5.0	76.0	9.0	45

Notes :

(1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5%.