

SURFACE MOUNT ZENER DIODE

Features

- ◆ Small plastic package suitable for surface mounted design.

MechanicalData

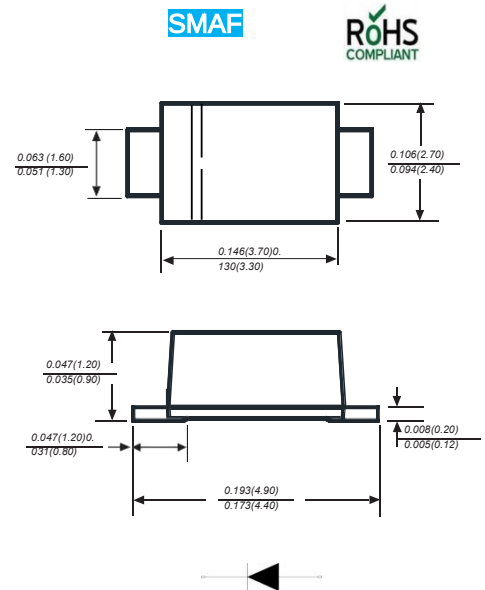
Case : JEDEC SMAF Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.002ounce, 0.07grams



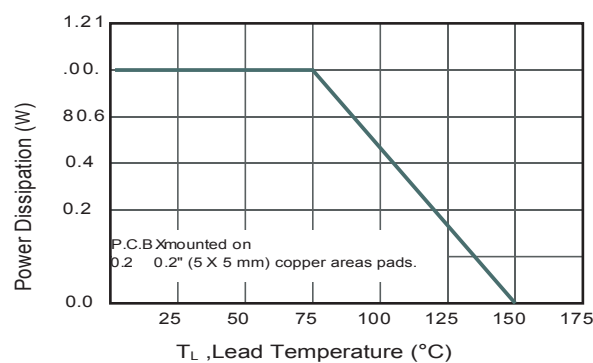
Dimensions in inches and (millimeters)

MaximumRatingsAndElectricalCharacteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Catalog Number	SYMBOLS	VALUE	UNITS
Power Dissipation at $T_L=75^{\circ}\text{C}$,	P_D	1.0	W
Forward Voltage at $I_F=200\text{mA}$	V_F	1.2	V
Junction Temperature Range	T_J	-55 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	T_S	-55 to + 150	$^{\circ}\text{C}$

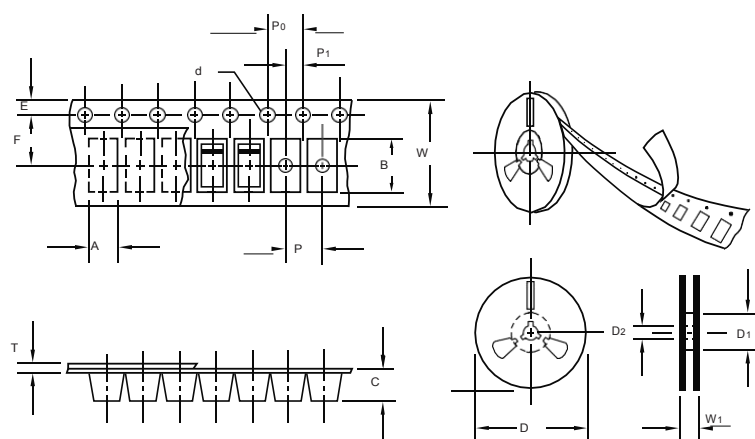
Fig.1 Maximum Continuous Power Derating



The cruve graph is for reference only

Characteristics at Ta = 25°C									
Type	Marking	Zener Voltage Range ⁽¹⁾				Dynamic Impedance	Reverse Current		Admissible Zener Current
		V _{ZT} (at I _{ZT})			I _{ZT}	Z _{ZT} (at I _{ZT})	I _R	at V _R	
		Min (V)	Nom (V)	Max (V)	(mA)	Max (Ω)	Max (μA)	(V)	I _{ZM} (mA)
1SMAF4728A	728A	3.103.	3.33.	3.503.	75	10	100	11	285
1SMAF4729A	729A	403.	63.9	804.	69	10	100	11	263
1SMAF4730A	730A	704.	4.34.	104.	64	9.09	50	11	243
1SMAF4731A	731A	064.	75.1	564.	58	.08.	25	23	219
1SMAF4732A	732A	504.	5.66.	935.	53	07.0	10	45	203
1SMAF4733A	733A	845.	26.8	365.	49	5.02	10	67	186
1SMAF4734A	734A	325.	7.58.	926.	45	.03.	10	78	170
1SMAF4735A	735A	866.	29.1	517.	41	54.0	10	9	154
1SMAF4736A	736A	467.	1011	187.	37	4.55	10		140
1SMAF4737A	737A	127.	12	888.	34	.07.	10		127
1SMAF4738A	738A	798.	1315	679.	31	08.0	10		116
1SMAF4739A	739A	609.	16	5910.	28	9.0	10		104
1SMAF4740A	740A	5010.	18	511.6	25		10		95
1SMAF4741A	741A	411.4	20	12.6	23		55		86
1SMAF4742A	742A	12.4	22	14.1	21		55		79
1SMAF4743A	743A	13.8	24	15.8	19	10	55	10	71
1SMAF4744A	744A	15.2	27	17.1	17	14	55	11	63
1SMAF4745A	745A	16.8	30	19.2	16	16	55	12	58
1SMAF4746A	746A	19.0	33	21.2	14	20	55	13	52
1SMAF4747A	747A	20.8	36	23.3	13	22	55	15	47
1SMAF4748A	748A	22.8	39	26.0	12	23	11	17	43
1SMAF4749A	749A	25.3	43	28.9	119.	25	11	18	38
1SMAF4750A	750A	28.2	47	32.0	58.5	35	11	21	35
1SMAF4751A	751A	31.3	51	34.9	7.57.	40	11	23	31
1SMAF4752A	752A	34.2	56	37.9	06.5	45	11	25	28
1SMAF4753A	753A	37.2	62	41.5	6.05	50	11	27	26
1SMAF4754A	754A	40.9	68	45.6	.55.0	60	11	30	24
1SMAF4755A	755A	44.9	75	49.8	4.54	70	11	32	22
1SMAF4756A	756A	48.6	82	54.0	.03.7	80	11	35	20
1SMAF4757A	757A	53.6	91	58.8	3.33	95	11	38	18
1SMAF4758A	758A	58.9		65.6	.02.8	110	11	42	17
1SMAF4759A	759A	64.6		71.7	2.52	125	1	47	15
1SMAF4760A	760A	71.2		78.8	.32.0	150		52	14
1SMAF4761A	761A	77.9		87.0	1.91	175		56	12
1SMAF4762A	762A	86.0		96.0	.71.6	200		62	11
1SMAF4763A	763A	95.0			1.41	250		69	10
1SMAF4764A	764A	104	100	105	.21.0	350		76	9.58.
1SMAF4765A	765A	114	110	116	1.01	450		84	67.8
1SMAF4766A	766A	125	120	127	.01.0	550		91	7.06.
1SMAF4767A	767A	140	135	142	1.01	700		100	35.8
1SMAF4768A	768A	155	150	157	.0	900		110	5.24.
1SMAF4769A	769A	170	165	172		1100		120	74.3
1SMAF4770A	770A	189	180	191		1200		135	39.3.
1SMAF4771A	771A	209	200	211		1400		150	73.4
1SMAF4772A	772A	229	220	231		1600		165	3.12.
1SMAF4773A	773A	249	240	251		1800		180	8
1SMAF4774A	774A	269	260	271		2000		190	
1SMAF4775A	775A	289	280	291		2100		205	
1SMAF4776A	776A	313	300	315		2300		230	
1SMAF4777A	777A		330	346		2500		250	

(1) V_{ZT} is tested with pulses (20 ms)



unit:mm

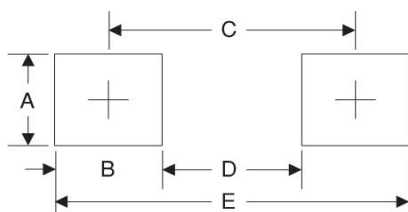
Item	Symbol	Tolerance	SMAF
Carrier width	A	0.1	2.80
Carrier length	B	0.1	4.75
Carrier depth	C	0.1	1.42
Sprocket hole	d	0.05	1.50
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D1	min	54.40
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	5.05
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P0	0.1	4.00
Embossment center	P1	0.1	2.00
Overall tape thickness	T	0.1	0.30
Tape width	W	0.3	8.00
Reel width	W1	1.0	12.30

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.

Reelpacking

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT FLACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SMAF	7"	3,000	4.0	6,000	210*208*203	178	400*265*400	120,000	10.0

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.8	0.071
B	1.6	0.063
C	3.8	0.150
D	2.2	0.087
E	5.4	0.213