



DESCRIPTION

The 1SMAF4728~1SMAF4777 are available in SMAF Package.

ORDERING INFORMATION

Package Type	Part Number		
SMAF	1SMAF4728	1SMAF4753	
	1SMAF4729	1SMAF4754	
	1SMAF4730	1SMAF4755	
	1SMAF4731	1SMAF4756	
	1SMAF4732	1SMAF4757	
	1SMAF4733	1SMAF4758	
	1SMAF4734	1SMAF4759	
	1SMAF4735	1SMAF4760	
	1SMAF4736	1SMAF4761	
	1SMAF4737	1SMAF4762	
	1SMAF4738	1SMAF4763	
	1SMAF4739	1SMAF4764	
	1SMAF4740	1SMAF4765	
	1SMAF4741	1SMAF4766	
	1SMAF4742	1SMAF4767	
	1SMAF4743	1SMAF4768	
	1SMAF4744	1SMAF4769	
	1SMAF4745	1SMAF4770	
	1SMAF4746	1SMAF4771	
	1SMAF4747	1SMAF4772	
	1SMAF4748	1SMAF4773	
	1SMAF4749	1SMAF4774	
	1SMAF4750	1SMAF4775	
	1SMAF4751	1SMAF4776	
	1SMAF4752	1SMAF4777	
	Note	SPQ: 3,000pcs/Reel	
	AiT provides all RoHS Compliant Products		

FEATURE

- Total Power Dissipation: Max. 1W.
- Wide Zener Reverse Voltage Range 3.3V to 330V
- Small Plastic Package Suitable for Surface Mounted Design.

MECHANICAL DATA

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

PIN DESCRIPTION



SMAF Package



PIN#	DESCRIPTION
1	CATHODE
2	ANODE



ABSOLUTE MAXIMUM RATINGS

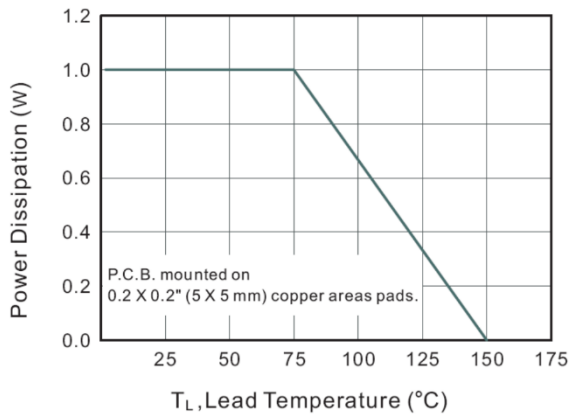
$T_a = 25^\circ\text{C}$, unless otherwise noted.

P_D , Power Dissipation at $T_L=75^\circ\text{C}$	1W
V_F , Forward Voltage at $I_F=200\text{mA}$	1.2V
T_J , Junction Temperature Range	$-55^\circ\text{C} \sim +150^\circ\text{C}$
T_S , Storage Temperature Range	$-55^\circ\text{C} \sim +150^\circ\text{C}$

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Maximum Continuous Power Derating





ELECTRICAL CHARACTERISTICS

T_a = 25°C, unless otherwise noted.

Part Number	Zener Voltage Range				Dynamic Impedance	Reverse Current		Admissible Zener Current
	V _{ZT} (at I _{ZT})			at I _{ZT}	Z _{ZT} (at I _{ZT})	I _R	at V _R	I _{ZM} (mA)
	Min.(V)	NOM(V)	Max.(V)	(mA)	Max.(Ω)	Max(μA)	(V)	
1SMAF4728	3.10	3.30	3.50	75	10	100	1	285
1SMAF4729	3.40	3.60	3.80	69	10	100	1	263
1SMAF4730	3.70	3.90	4.10	64	9	50	1	243
1SMAF4731	4.06	4.30	4.56	58	9	25	1	219
1SMAF4732	4.50	4.70	4.93	53	8	10	1	203
1SMAF4733	4.84	5.10	5.36	49	7	10	1	186
1SMAF4734	5.32	5.60	5.92	45	5	10	2	170
1SMAF4735	5.86	6.20	6.51	41	2	10	3	154
1SMAF4736	6.46	6.80	7.18	37	3.50	10	4	140
1SMAF4737	7.12	7.50	7.88	34	4	10	5	127
1SMAF4738	7.79	8.20	8.67	31	4.50	10	6	116
1SMAF4739	8.60	9.10	9.59	28	5	10	7	104
1SMAF4740	9.50	10	10.50	25	7	10	7	95
1SMAF4741	10.40	11	11.60	23	8	5	8	86
1SMAF4742	11.40	12	12.60	21	9	5	9	79
1SMAF4743	12.40	13	14.10	19	10	5	10	71
1SMAF4744	13.80	15	15.80	17	14	5	11	63
1SMAF4745	15.20	16	17.10	16	16	5	12	58
1SMAF4746	16.80	18	19.20	14	20	5	13	52
1SMAF4747	19.00	20	21.20	13	22	5	15	47
1SMAF4748	20.80	22	23.30	12	23	5	17	43
1SMAF4749	22.80	24	26	11	25	5	18	38
1SMAF4750	25.30	27	28.90	9.50	35	5	21	35
1SMAF4751	28.20	30	32.00	8.50	40	5	23	31
1SMAF4752	31.30	33	34.90	7.50	45	5	25	28
1SMAF4753	34.20	36	37.90	7	50	5	27	26
1SMAF4754	37.20	39	41.50	6.50	60	5	30	24
1SMAF4755	40.90	43	45.60	6	70	1	32	22

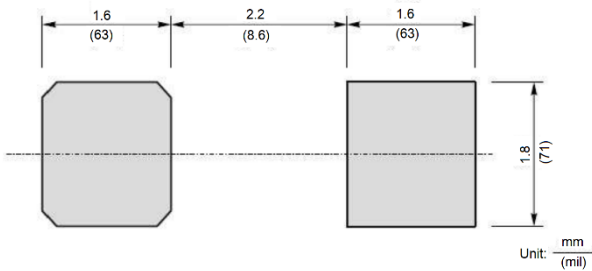
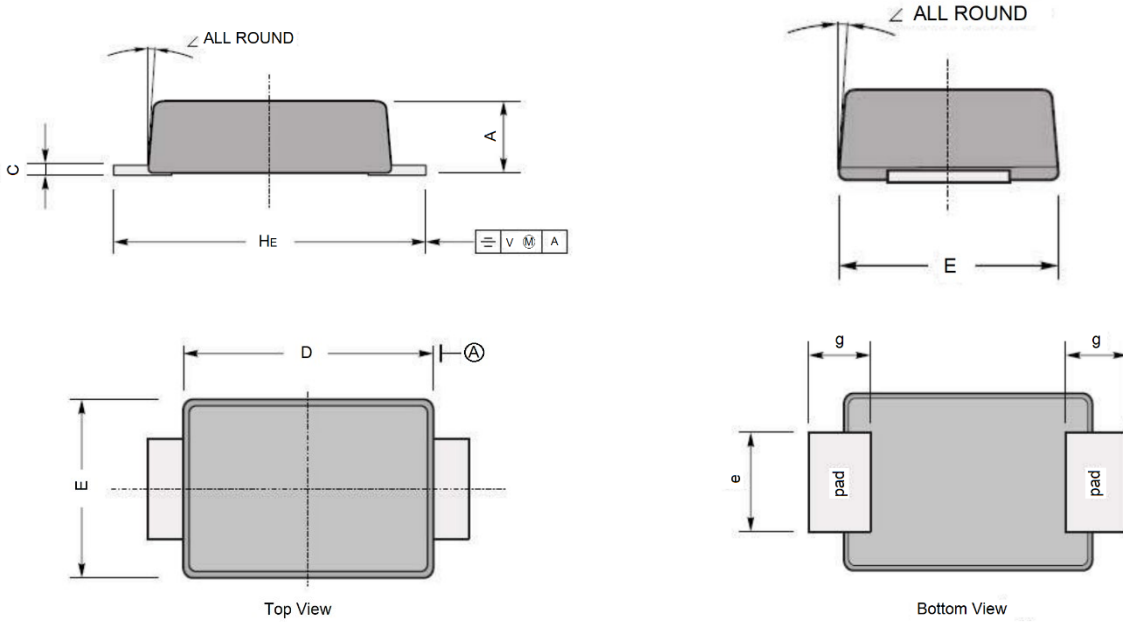


1SMAF4728	Zener Voltage Range				Dynamic Impedance	Reverse Current		R Admissible Zener Current
	V _{ZT} (at I _{ZT})			at I _{ZT}	Z _{ZT} (at I _{ZT})	I _R	at V _R	
	Min.(V)	NOM(V)	Max.(V)	(mA)	Max.(Ω)	Max(μA)	(V)	I _{ZM} (mA)
1SMAF4756	44.90	47	49.80	5.50	80	1	35	20
1SMAF4757	48.60	51	54.00	5	95	1	38	18
1SMAF4758	53.60	56	58.80	4.50	110	1	42	17
1SMAF4759	58.90	62	65.60	4	125	1	47	15
1SMAF4760	64.60	68	71.70	3.70	150	1	52	14
1SMAF4761	71.20	75	78.80	3.30	175	1	56	12
1SMAF4762	77.90	82	87.00	3	200	1	62	11
1SMAF4763	86	91	96.00	2.80	250	1	69	10
1SMAF4764	95	100	105	2.50	350	1	76	9.50
1SMAF4765	104	110	116	2.30	450	1	84	8.60
1SMAF4766	114	120	127	2	550	1	91	7.80
1SMAF4767	125	135	142	1.90	700	1	100	7
1SMAF4768	140	150	157	1.70	900	1	110	6.30
1SMAF4769	155	165	172	1.60	1100	1	120	5.80
1SMAF4770	170	180	191	1.40	1200	1	135	5.20
1SMAF4771	189	200	211	1.20	1400	1	150	4.70
1SMAF4772	209	220	231	1	1600	1	165	4.30
1SMAF4773	229	240	251	1	1800	1	180	3.90
1SMAF4774	249	260	271	1	2000	1	190	3.70
1SMAF4775	269	280	291	1	2100	1	205	3.40
1SMAF4776	289	300	315	1	2300	1	230	3.10
1SMAF4777	313	330	346	1	2500	1	250	2.80



PACKAGE INFORMATION

Dimension in SMAF Package (Unit: mm)



The recommended mounting pad size

SYMBOL	MIN	MAX
A	0.900	1.100
C	0.120	0.200
D	3.300	3.700
E	2.400	2.700
e	1.300	1.600
g	0.800	1.200
H_E	4.400	4.900
\angle	7°	



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