



DESCRIPTION

The SZAF5.1A~SZAF220A are available in SMAF Package

ORDERING INFORMATION

Package Type	Part Number	
SMAF	SZAF5.1A	SZAF36A
	SZAF5.6A	SZAF39A
	SZAF6.2A	SZAF43A
	SZAF6.8A	SZAF47A
	SZAF7.5A	SZAF51A
	SZAF8.2A	SZAF56A
	SZAF9.1A	SZAF62A
	SZAF10A	SZAF68A
	SZAF11A	SZAF75A
	SZAF12A	SZAF82A
	SZAF13A	SZAF91A
	SZAF15A	SZAF100A
	SZAF16A	SZAF110A
	SZAF18A	SZAF120A
	SZAF20A	SZAF130A
	SZAF22A	SZAF150A
	SZAF24A	SZAF160A
	SZAF27A	SZAF180A
SZAF30A	SZAF200A	
SZAF33A	SZAF220A	
Note	SPQ: 5,000pcs/Reel	
AiT provides all RoHS Compliant Products		

FEATURES

- 1.5 W SMAF
- Zener voltage regulator diodes
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Guarding for over voltage protection
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Available in SMAF Package

MECHANICAL DATA

Case: JEDEC SMAF molded plastic

Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026

Polarity: Color band denoted cathode except Bipolar

Mounting Position: Any

Weight : Approximated 0.0327 gram

PIN DESCRIPTION





ELECTRICAL CHARACTERISTIC

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	VALUE	Unit
Steady State Power Dissipation at $T_L=75^{\circ}\text{C}$ ^{NOTE1}	$P_{M(AV)}$	1.5	Watts
Z-current	I_Z	P_V/V_Z	mA
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JECED Method) ^{NOTE2}	I_{FSM}	40	Amps
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +150	°C

NOTE1: 8.0mm² (.013mm thick) land areas

NOTE2: 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.



PRODUCT CHARACTERISTIC

Vz tolerance : ±5%; Ta=25°C Vfmax =1.2V @ If = 200mA P=1 W

Type	Zener	Current	A and B Suffix only			Leakage Current		Surge current	Maximum Regulator Current2)		
	Voltage	IzT	ZzT@IzT	Zzk@Izk	Zzk@Izk	IR	VR	IR @ Tamb=25°C	IzM @ Tamb =50°C		
	Vz@LzT										
	Volts	mA	Ohms	Ohms	mA	uA Max	Volts	mA	mA		
SZAF5.1A	5.1	49	7	550	1	100	1.0	890	178		
SZAF5.6A	5.6	45	5	600			2.0	810	164		
SZAF6.2A	6.2	41	2	700			3.0	730	146		
SZAF6.8A	6.8	37	4	1300			4	990	200		
SZAF7.5A	7.5	34	4.5	1300			0.5	5	908	182	
SZAF8.2A	8.2	31	5.5	1300			0.5	6	825	165	
SZAF9.1A	9.1	28	6	1300			0.5	7	750	150	
SZAF10A	10	25	7	1300			0.25	20	7.6	681	137
SZAF11A	11	23	8	1300					8.4	621	125
SZAF12A	12	21	9	1300					9.1	570	114
SZAF13A	13	19	10	1300	9.9	516			104		
SZAF15A	15	17	14	1300	11.4	456			92		
SZAF16A	16	15.5	16	1300	12.2	428			86		
SZAF18A	18	14	20	1300	13.7	375			75		
SZAF20A	20	12.5	22	1300	15.2	338			68		
SZAF22A	22	11.5	23	1300	16.7	308			62		
SZAF24A	24	10.5	25	1300	18.2	285			57		
SZAF27A	27	9.5	35	1300	20.6	255	51				
SZAF30A	30	8.5	40	1500	22.8	225	45				
SZAF33A	33	7.5	45	1500	5	5	25.1	203	41		
SZAF36A	36	7	50	1500			27.4	188	38		
SZAF39A	39	6.5	60	1500			29.7	173	35		
SZAF43A	43	6	70	2500			32.7	165	33		
SZAF47A	47	5.5	80	2500			35.8	143	29		
SZAF51A	51	5	95	2500			38.8	135	27		
SZAF56A	56	4.5	110	2500			42.6	120	24		
SZAF62A	62	4	125	2500			47.1	105	21		
SZAF68A	68	3.7	150	2500			51.7	98	20		
SZAF75A	75	3.3	175	2500			56	90	18		
SZAF82A	82	3	200	3000	62.2	83	17				
SZAF91A	91	2.8	250	3000	69.2	75	15				
SZAF100A	100	2.5	350	3000	76	68	14				
SZAF110A	110	2	550	5000	83	63	12				
SZAF120A	120	1.5	750	5500	90	57	11				
SZAF130A	130	1	900	6000	98	51	9				
SZAF150A	150	1	1200	6500	113	45	9				
SZAF160A	160	1	1350	7000	120	42	9				
SZAF180A	180	1	1650	8500	135	38	8				
SZAF200A	200	1	1950	10000	150	35	6				
SZAF220A	220	1	2300	12000	165	32	6				



TYPICAL CHARACTERISTICS

Figure. 1 Vz--Iz

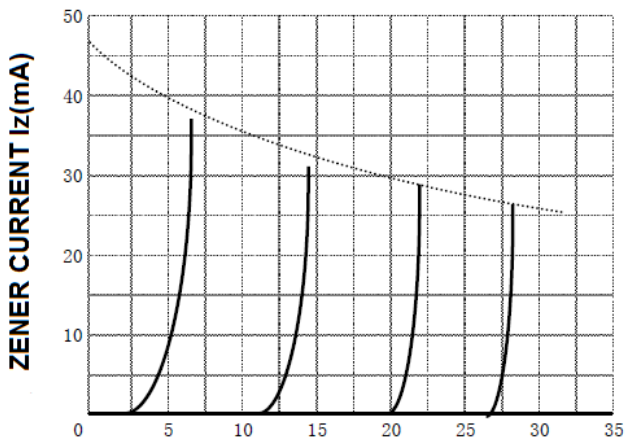


Figure. 2 Vz--Iz

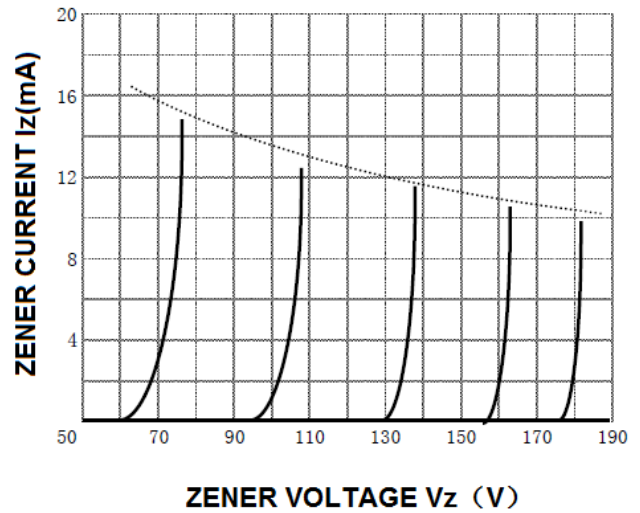
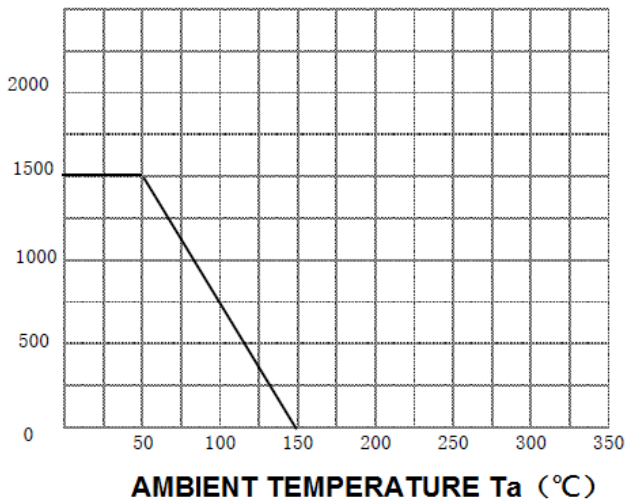


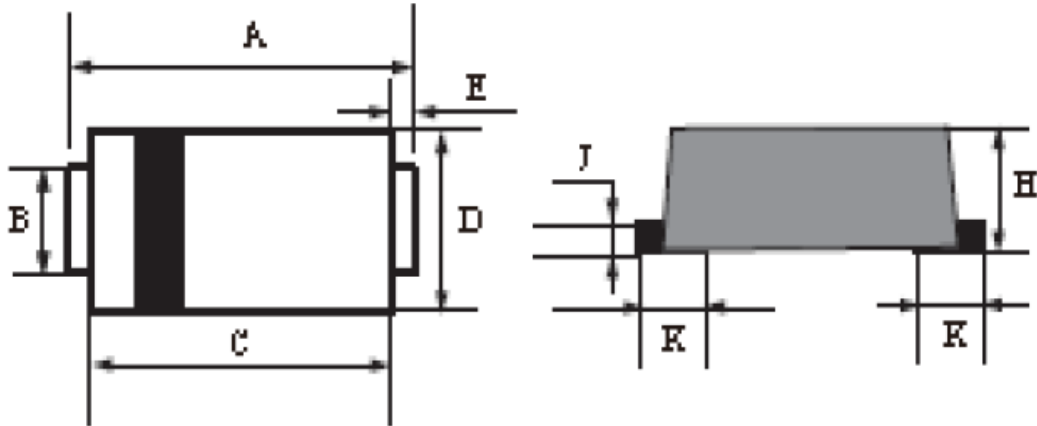
Figure. 3 P--Ta



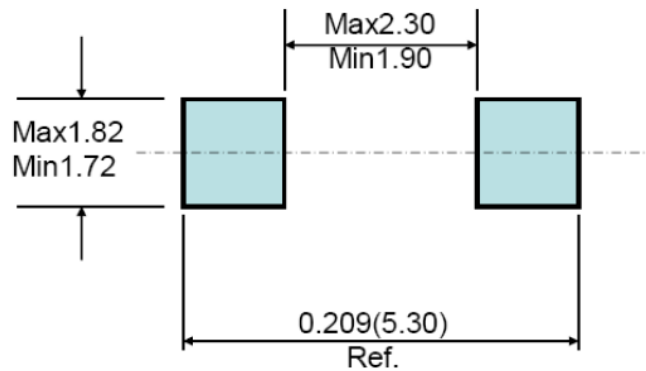


PACKAGE INFORMATION

Dimension in SMAF (Unit: mm)



Mounting Pad Layout



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.4	4.8	0.173	0.189
B	1.3	1.5	0.051	0.059
C	3.3	3.7	0.130	0.146
D	2.3	2.7	0.091	0.106
E	0.90 TYP		0.035 TYP	
H	0.9	1.2	0.036	0.047
J	0.11	0.21	0.005	0.009



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