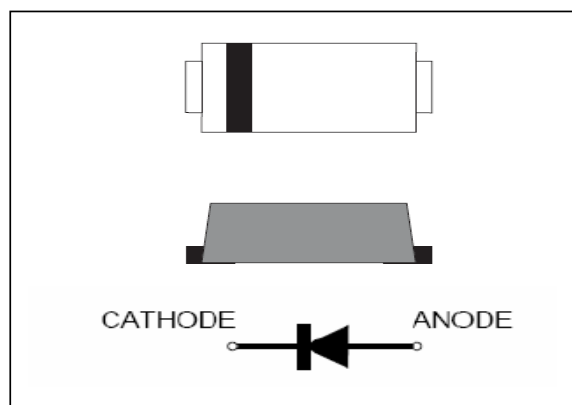


SZAF *** Series

GLASS PASSIVATED JUNCTION Zener voltage regulator diodes 1.5 Watt Steady State

Feature

- * 1.5 W SMA-FL
- * Zener voltage regulator diodes
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * We declare that the material of product compliance with RoHS requirements.
- * Guarding for over voltage protection
- * High temperature soldering guaranteed: 260°C/10 seconds at terminals
- * IEC61000-4-2 ESD Air Contact $\geq \pm 15KV$
- * MSL: 1



We declare that the material of product is Haloggen free (green epoxy compound)

Mechanical Data

Case: JEDEC SMA-FL 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

1. 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%.

RATING	SYMBOL	VALUE	UNITS
Steady State Power Dissipation at $T_L = 75^\circ C$ (Note 1)	$P_{M(AV)}$	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 (JEDEC Method) (Note 2)	I_{FSM}	40	Amps
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +150	$^\circ C$

NOTES:

1. 8.0mm² (.013mm thick) land areas
2. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.



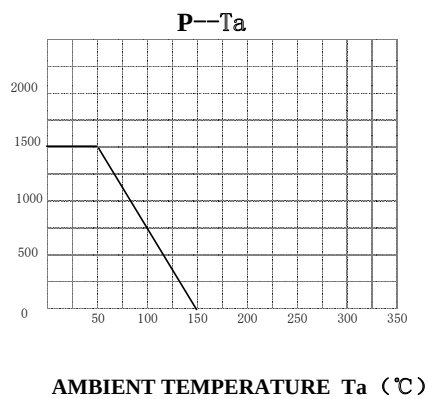
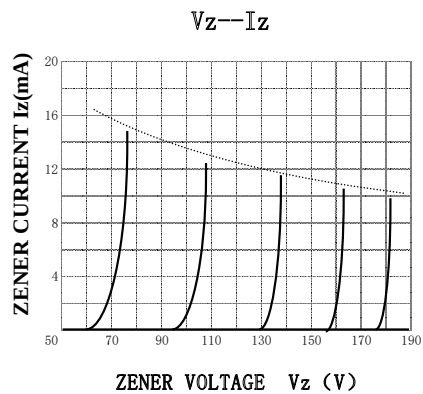
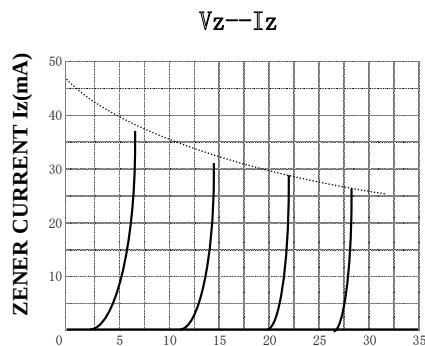
SZAF5.1 ~ SZAF220

2.Product Characteristic

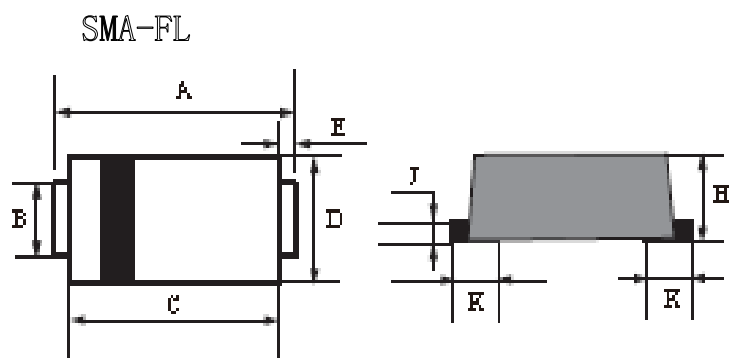
Vz tolerance : ±5%; Ta=25℃ Vfmax =1.2V @ IF = 200mA P=1 W

Type	Device marking code	Zener	Current	A and B Suffix only			Leakage Current		Surge current	Maximum Regulator Current2)
		Voltage	I _{zt}	Z _{zt} @ I _{zt}	Z _{zk} @ I _{zk}	Z _{zk} @ I _{zk}	I _R	V _R	IR @Tamb = 25 °C	IZM @ Tamb =50 °C
		<u>Vz@Izt</u>								
		Volts	mA	Ohms	Ohms	m A	uA Max	Volts	mA	mA
SZAF5.1	Z5.1	5.1	49	7	550	1	100	1.0	890	178
SZAF5.6	Z5.6	5.6	45	5	600			2.0	810	164
SZAF6.2	Z6.2	6.2	41	2	700			3.0	730	146
SZAF6.8	Z6.8	6.8	37	4	1300			4	990	200
SZAF7.5	Z7.5	7.5	34	4.5	1300	0.5		5	908	182
SZAF8.2	Z8.5	8.2	31	5.5	1300	0.5		6	825	165
SZAF9.1	Z9.1	9.1	28	6	1300	0.5		7	750	150
SZAF10	Z10	10	25	7	1300	0.25	20	7.6	681	137
SZAF11	Z11	11	23	8	1300			8.4	621	125
SZAF12	Z12	12	21	9	1300			9.1	570	114
SZAF13	Z13	13	19	10	1300			9.9	516	104
SZAF15	Z15	15	17	14	1300			11.4	456	92
SZAF16	Z16	16	15.5	16	1300			12.2	428	86
SZAF18	Z18	18	14	20	1300			13.7	375	75
SZAF20	Z20	20	12.5	22	1300			15.2	338	68
SZAF22	Z22	22	11.5	23	1300			16.7	308	62
SZAF24	Z24	24	10.5	25	1300			18.2	285	57
SZAF27	Z27	27	9.5	35	1300			20.6	255	51
SZAF30	Z30	30	8.5	40	1500			22.8	225	45
SZAF33	Z33	33	7.5	45	1500		5	25.1	203	41
SZAF36	Z36	36	7	50	1500			27.4	188	38
SZAF39	Z39	39	6.5	60	1500			29.7	173	35
SZAF43	Z43	43	6	70	2500			32.7	165	33
SZAF47	Z47	47	5.5	80	2500			35.8	143	29
SZAF51	Z51	51	5	95	2500			38.8	135	27
SZAF56	Z56	56	4.5	110	2500			42.6	120	24
SZAF62	Z62	62	4	125	2500			47.1	105	21
SZAF68	Z68	68	3.7	150	2500			51.7	98	20
SZAF75	Z75	75	3.3	175	2500			56	90	18
SZAF82	Z82	82	3	200	3000			62.2	83	17
SZAF91	Z91	91	2.8	250	3000			69.2	75	15
SZAF100	Z100	100	2.5	350	3000			76	68	14
SZAF110	Z110	110	2	550	5000			83	63	12
SZAF120	Z120	120	1.5	750	5500			90	57	11
SZAF130	Z130	130	1	900	6000			98	51	9
SZAF150	Z150	150	1	1200	6500			113	45	9
SZAF160	Z160	160	1	1350	7000			120	42	9
SZAF180	Z180	180	1	1650	8500			135	38	8
SZAF200	Z200	200	1	1950	10000			150	35	6
SZAF220	Z220	220	1	2300	12000			165	32	6

3.Characteristic Curves



3. dimension:



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	0.90Typ		0.035Typ	
H	0.9	1.2	0.036	0.047
J	0.11	0.21	0.005	0.009

Mounting Pad Layout

