

GLASS PASSIVATED JUNCTION Zener voltage regulator diodes

1.0 Watt Steady State

Feature

- * 1W SMA
- * 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



Mechanical Data

Case: JEDEC DO-214AC molded plastic

Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denoted cathode except Bipolar

Mounting Position: Any

Weight: 0.0023 ounce, 0.065 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 $T_L=75^{\circ}\text{C}$ (Note1)	$P_{M(AV)}$	1.0	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) (Note 2)	I_{FSM}	40	Amps
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +150	$^{\circ}\text{C}$

NOTES:

1. Mounted on Copper Leaf area of 1.57in^2 (40mm^2).
2. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

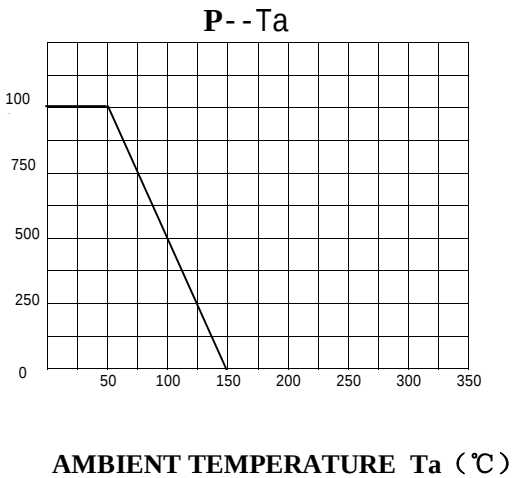
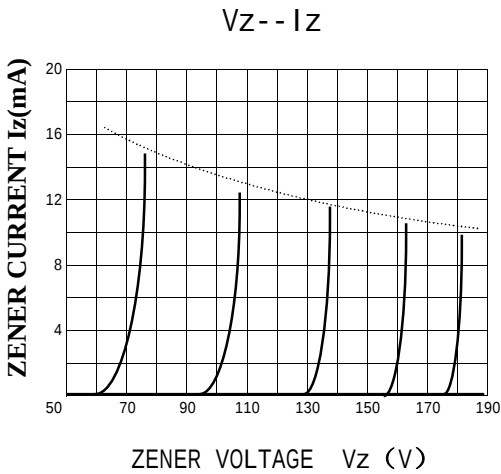
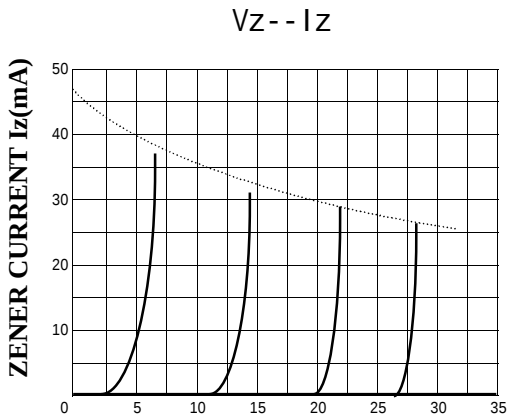
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2.Product Characteristic

Vz tolerance : ±5%; Ta=25°C 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	I _{ZM} @ Tamb =50 ° C
		<u>Vz@Lzt</u>								
		Volts	mA	Ohms	Ohms	m A	uA Max	Volts	mA	mA
SZA6.8A	Z6.8A	6.8	37	4	1300	1	100	4	660	133
SZA7.5A	Z7.5A	7.5	34	4.5	1300	0.5		5	605	121
SZA8.2A	Z8.2A	8.2	31	5.5	1300	0.5		6	550	110
SZA9.1A	Z9.1A	9.1	28	6	1300	0.5		7	500	100
SZA10A	Z10A	10	25	7	1300			7.6	454	91
SZA11A	Z11A	11	23	8	1300		20	8.4	414	83
SZA12A	Z12A	12	21	9	1300			9.1	380	76
SZA13A	Z13A	13	19	10	1300			9.9	344	69
SZA15A	Z15A	15	17	14	1300			11.4	304	61
SZA16A	Z16A	16	15.5	16	1300			12.2	285	57
SZA18A	Z18A	18	14	20	1300			13.7	250	50
SZA20A	Z20A	20	12.5	22	1300			15.2	225	45
SZA22A	Z22A	22	11.5	23	1300			16.7	205	41
SZA24A	Z24A	24	10.5	25	1300			18.2	190	38
SZA27A	Z27A	27	9.5	35	1300			20.6	170	34
SZA30A	Z30A	30	8.5	40	1500			22.8	150	30
SZA33A	Z33A	33	7.5	45	1500		5	25.1	135	27
SZA36A	Z36A	36	7	50	1500			27.4	125	25
SZA39A	Z39A	39	6.5	60	1500			29.7	115	23
SZA43A	Z43A	43	6	70	2500			32.7	110	22
SZA47A	Z47A	47	5.5	80	2500			35.8	95	19
SZA51A	Z51A	51	5	95	2500			38.8	90	18
SZA56A	Z56A	56	4.5	110	2500			42.6	80	16
SZA62A	Z62A	62	4	125	2500			47.1	70	14
SZA68A	Z68A	68	3.7	150	2500			51.7	65	13
SZA75A	Z75A	75	3.3	175	2500			56	60	12
SZA82A	Z82A	82	3	200	3000			62.2	55	11
SZA91A	Z91A	91	2.8	250	3000			69.2	50	10
SZA100A	Z100A	100	2.5	350	3000			76	45	9
SZA110A	Z110A	110	2	550	5000			83	42	8
SZA120A	Z120A	120	1.5	750	5500			90	38	7
SZA130A	Z130A	130	1	900	6000			98	34	6
SZA150A	Z150A	150	1	1200	6500			113	30	6
SZA160A	Z160A	160	1	1350	7000			120	28	6
SZA180A	Z180A	180	1	1650	8500			135	25	5
SZA200A	Z200A	200	1	1950	10000			150	23	4

3.Characteristic Curves



4.Package Dimensions in inches and (millimeters)

