

GLASS PASSIVATED JUNCTION

Zener voltage regulator diodes

S-SZA2.4A THRU S-SZA200A



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
- * S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



We declare that the material of product compliance with ROHS requirements

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
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +150	$^{\circ}\text{C}$
Typical thermal resistance (Note 2)	$R_{\theta JA}$	150	$^{\circ}\text{C/W}$
	$R_{\theta JC}$	50	

NOTES:

1. Mounted on Copper Leaf area of 1.57in²(40mm²)
2. Device mounted on an FR4 PCB, Single-sided copper(50μm thick), mounting pad for cathode 1.77mm×1.65mm, mounting pad for Anode 1.77mm×1.65mm.

GLASS PASSIVATED JUNCTION

Zener voltage regulator diodes

S-SZA2.4A THRU S-SZA200A

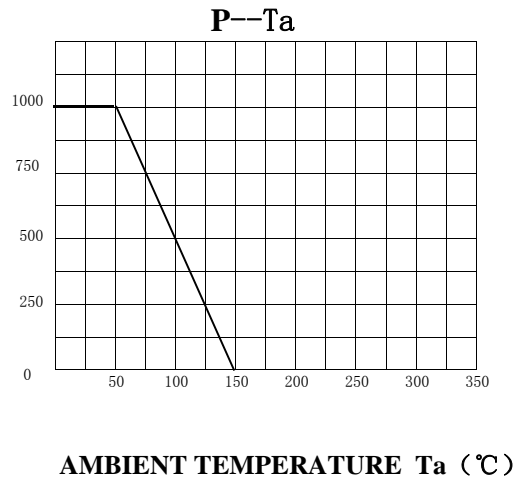
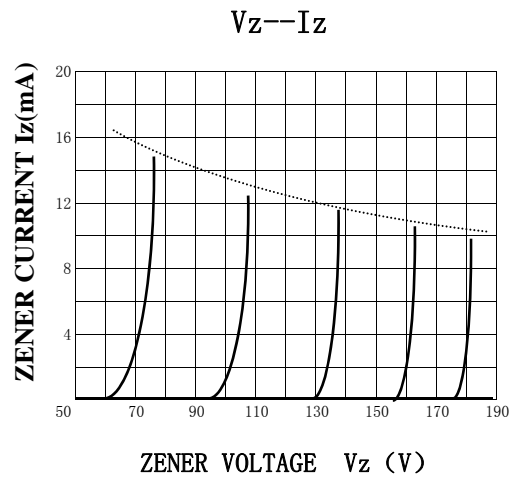
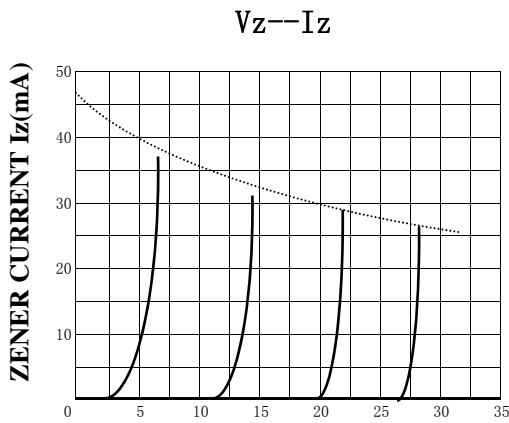


2.Product Characteristic

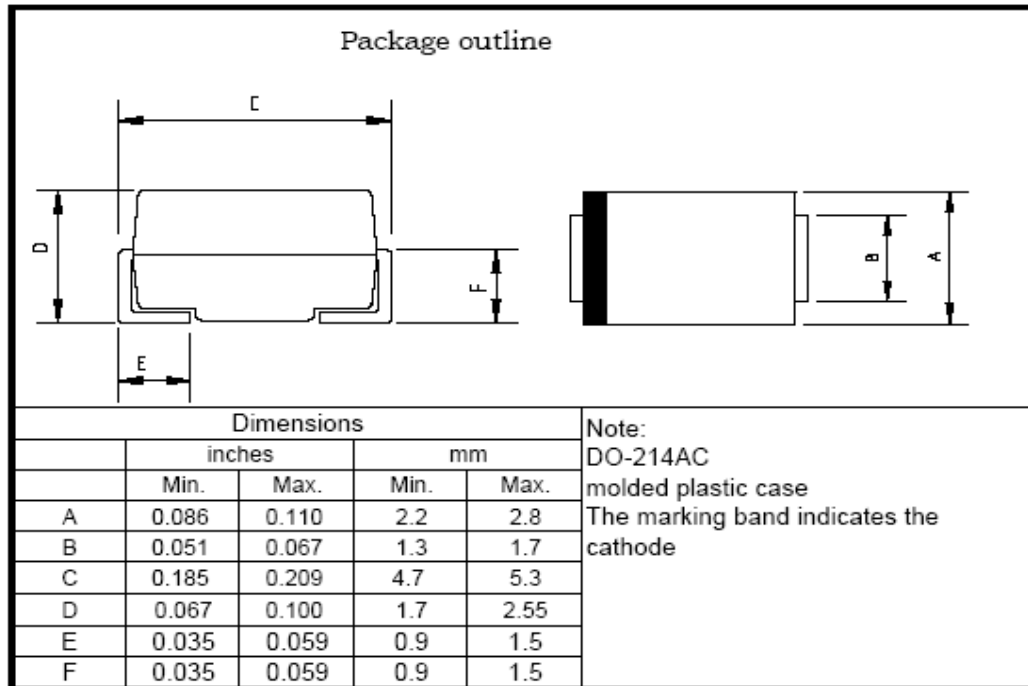
Vz tolerance : ±5%; Ta=25°C Vfmax =1.2V @ IF = 200mA P=1 W

Type	Device marking code	Zener	Current	A and B Suffix only			Leakage Current		Maximum Regulator Current2)		
		Voltage	Izt	Zzt @ Izt	Zzk@ Izk	Izk	IR	VR	IZM @ Tamb =50 °C		
		Vz@Lzt									
		Volts	mA	Ohms	Ohms	m A	uA Max	Volts	mA		
S-SZA2.4A	Z2.4	2.4	102	30	1200	1	100	1.0	378		
S-SZA2.5A	Z2.5	2.5	98	30	1250			1.0	362		
S-SZA2.7A	Z2.7	2.7	90	30	1300			1.0	334		
S-SZA2.8A	Z2.8	2.8	87	30	1400			1.0	324		
S-SZA3.0A	Z3.0	3.0	82	29	1600			1.0	302		
S-SZA3.3A	Z3.3	3.3	76	28	400			1.0	276		
S-SZA3.6A	Z3.6	3.6	69	24	400			1.0	252		
S-SZA3.9A	Z3.9	3.9	64	23	400			1.0	238		
S-SZA4.3A	Z4.3	4.3	58	22	400			1.0	214		
S-SZA4.7A	Z4.7	4.7	53	19	400			1.0	194		
S-SZA5.1A	Z5.1A	5.1	49	7	550			1.0	178		
S-SZA5.6A	Z5.6A	5.6	45	5	600			2.0	164		
S-SZA6.2A	Z6.2A	6.2	41	2	700			3.0	146		
S-SZA6.8A	Z6.8A	6.8	37	4	1300			4	133		
S-SZA7.5A	Z7.5A	7.5	34	4.5	1300			0.5	70	5	121
S-SZA8.2A	Z8.2A	8.2	31	5.5	1300			0.5		6	110
S-SZA9.1A	Z9.1A	9.1	28	6	1300			0.5		7	100
S-SZA10A	Z10A	10	25	7	1300	0.25	2	7.6	91		
S-SZA11A	Z11A	11	23	8	1300			8.4	83		
S-SZA12A	Z12A	12	21	9	1300			9.1	76		
S-SZA13A	Z13A	13	19	10	1300		9.9	69			
S-SZA15A	Z15A	15	17	14	1300		11.4	61			
S-SZA16A	Z16A	16	15.5	16	1300		12.2	57			
S-SZA18A	Z18A	18	14	20	1300		13.7	50			
S-SZA20A	Z20A	20	12.5	22	1300		15.2	45			
S-SZA22A	Z22A	22	11.5	23	1300		16.7	41			
S-SZA24A	Z24A	24	10.5	25	1300		18.2	38			
S-SZA27A	Z27A	27	9.5	35	1300		20.6	34			
S-SZA30A	Z30A	30	8.5	40	1500		22.8	30			
S-SZA33A	Z33A	33	7.5	45	1500		25.1	27			
S-SZA36A	Z36A	36	7	50	1500		27.4	25			
S-SZA39A	Z39A	39	6.5	60	1500		29.7	23			
S-SZA43A	Z43A	43	6	70	2500		32.7	22			
S-SZA47A	Z47A	47	5.5	80	2500		35.8	19			
S-SZA51A	Z51A	51	5	95	2500		38.8	18			
S-SZA56A	Z56A	56	4.5	110	2500		42.6	16			
S-SZA62A	Z62A	62	4	125	2500		47.1	14			
S-SZA68A	Z68A	68	3.7	150	2500		51.7	13			
S-SZA75A	Z75A	75	3.3	175	2500		56	12			
S-SZA82A	Z82A	82	3	200	3000		62.2	11			
S-SZA91A	Z91A	91	2.8	250	3000	69.2	10				
S-SZA100A	Z100A	100	2.5	350	3000	76	9				
S-SZA110A	Z110A	110	2	550	5000	83	8				
S-SZA120A	Z120A	120	1.5	750	5500	90	7				
S-SZA130A	Z130A	130	1	900	6000	98	6				
S-SZA150A	Z150A	150	1	1200	6500	113	6				
S-SZA160A	Z160A	160	1	1350	7000	120	6				
S-SZA180A	Z180A	180	1	1650	8500	135	5				
S-SZA200A	Z200A	200	1	1950	10000	150	4				

3.Characteristic Curves



4.Package Dimensions in inches and (millimeters)



Mounting Pad Layout
 ---SMA

