



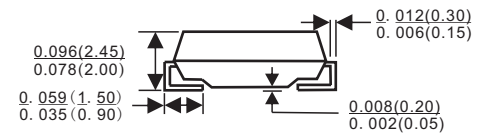
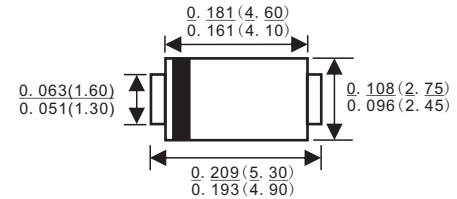
## SMA/DO-214AC

### Features

- ◇ Complete Voltage Range 3.9 to 200 Volts
- ◇ High peak reverse power dissipation
- ◇ High reliability
- ◇ Low leakage current

### Mechanical Data

- ◇ Case : SMA (DO-214AC) Molded plastic
- ◇ Epoxy : UL94V-O rate flame retardant
- ◇ Polarity : Color band denotes cathode end
- ◇ Mounting position : Any
- ◇ Weight : 0.064 gram



Dimensions in inches and(millimeters)

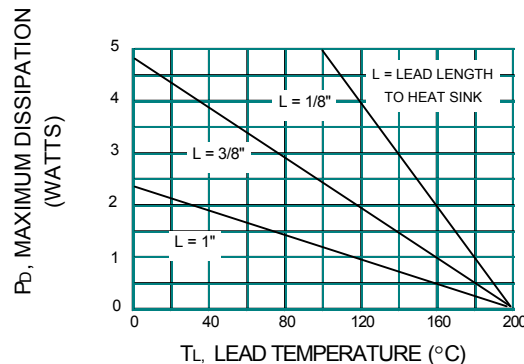
### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Unit
DC Power Dissipation at $T_L = 75^\circ\text{C}$ (Note1)	$P_D$	3.0	Watts
Maximum Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1.5	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\theta JA}$	60	K / W
Junction Temperature Range	$T_J$	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ\text{C}$

- Note :** (1)  $T_L$  = Lead temperature at 3/8 " (9.5mm) from body  
 (2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

**Fig. 1 Power Temperature Derating Curve**



## ELECTRICAL CHARACTERISTICS

Rating at = 25 °C ambient temperature unless otherwise specified

TYPE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	Vz @ IzT	IzT	ZzT @ IzT	Zzk @ IzK	IzK	IR @ VR (V)		IzM
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)		(mA)
SZ553Z	3.9	192	4.5	400	1.0	25	1.0	630
SZ554D	4.3	174	4.5	400	1.0	5.0	1.0	590
SZ554H	4.7	160	4.0	500	1.0	5.0	1.0	550
SZ555B	5.1	147	3.5	550	1.0	5.0	1.0	520
SZ555G	5.6	134	2.5	600	1.0	5.0	2.0	480
SZ556C	6.2	121	1.5	700	1.0	5.0	3.0	435
SZ556I	6.8	110	2.0	700	1.0	5.0	4.0	393
SZ557F	7.5	100	2.0	700	0.5	5.0	5.0	360
SZ558C	8.2	91	2.3	700	0.5	5.0	6.0	330
SZ559B	9.1	82	2.5	700	0.5	3.0	7.0	297
SZ5510	10	75	3.5	700	0.3	3.0	7.6	270
SZ5511	11	68	4.0	700	0.25	1.0	8.4	225
SZ5512	12	63	4.5	700	0.25	1.0	9.1	246
SZ5513	13	58	4.5	700	0.25	0.5	9.1	208
SZ5514	14	53	5.0	700	0.25	0.5	10.6	193
SZ5515	15	50	5.5	700	0.25	0.5	11.4	180
SZ5516	16	47	5.5	700	0.25	0.5	12.2	169
SZ5517	17	44	6.0	750	0.25	0.5	13.0	159
SZ5518	18	42	6.0	750	0.25	0.5	13.7	150
SZ5519	19	40	7.0	750	0.25	0.5	14.4	142
SZ5520	20	37	7.0	750	0.25	0.5	15.2	135
SZ5522	22	34	8.0	750	0.25	0.5	16.7	123
SZ5524	24	31	9.0	750	0.25	0.5	18.2	112
SZ5527	27	28	10	750	0.25	0.5	20.6	100
SZ5528	28	27	12	750	0.25	0.5	21.0	96
SZ5530	30	25	16	1000	0.25	0.5	22.5	90
SZ5533	33	23	20	1000	0.25	0.5	25.1	82
SZ5536	36	21	22	1000	0.25	0.5	27.4	75
SZ5539	39	19	28	1000	0.25	0.5	29.7	69
SZ5543	43	17	33	1500	0.25	0.5	32.7	63
SZ5547	47	16	38	1500	0.25	0.5	35.6	57
SZ5551	51	15	45	1500	0.25	0.5	38.8	53
SZ5556	56	13	50	2000	0.25	0.5	42.6	48
SZ5562	62	12	55	2000	0.25	0.5	47.1	44
SZ5568	68	11	70	2000	0.25	0.5	51.7	40
SZ5575	75	10	85	2000	0.25	0.5	56.0	36
SZ5582	82	9.1	95	3000	0.25	0.5	62.2	33
SZ5591	91	8.2	115	3000	0.25	0.5	69.2	30
SZ55B0	100	7.5	160	3000	0.25	0.5	76.0	27

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Rating at = 25 °C ambient temperature unless otherwise specified

TYPE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	Vz @ IzT	IzT	ZzT @ IzT	Zzk @ IzK	IzK	IR @ VR (V)		IzM
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)		(mA)
<b>SZ55B1</b>	110	6.8	225	4000	0.25	0.5	83.6	25
<b>SZ55B2</b>	120	6.3	300	4500	0.25	0.5	91.2	22
<b>SZ55B3</b>	130	5.8	375	5000	0.25	0.5	98.8	21
<b>SZ55B4</b>	140	5.3	475	5000	0.25	0.5	106.4	19
<b>SZ55B5</b>	150	5.0	550	6000	0.25	0.5	114.0	18
<b>SZ55B6</b>	160	4.7	625	6500	0.25	0.5	121.6	17
<b>SZ55B7</b>	170	4.4	650	7000	0.25	0.5	130.4	16
<b>SZ55B8</b>	180	4.2	700	7000	0.25	0.5	136.8	15
<b>SZ55B9</b>	190	4.0	800	8000	0.25	0.5	144.8	14
<b>SZ55D0</b>	200	3.7	875	8000	0.25	0.5	152.0	13

**Note:** ( 1 ) Suffix " 5 " indicates ± 5.0% tolerance, suffix " 10 " indicates ± 10.0% tolerance.

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMA	5000/REEL	80000	36X30.6X31	12.00	11.00