

# SMZ35 Series

# SURFACE MOUNT SILICON ZENER DIODES

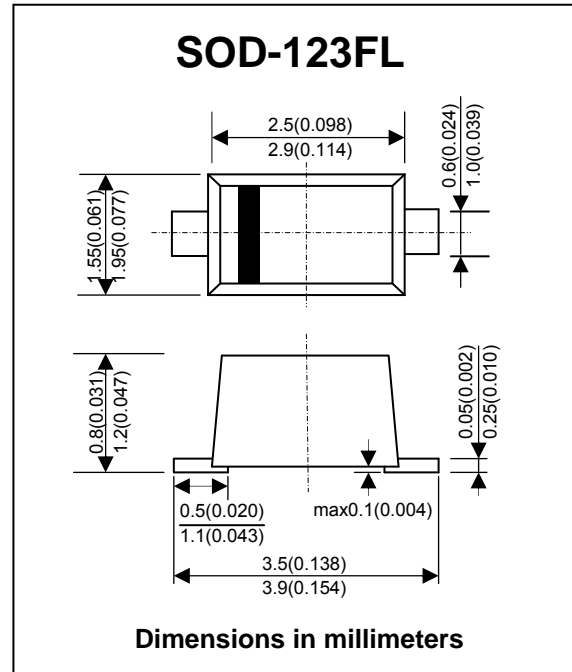
**V<sub>Z</sub> : 3.3 - 200 Volts**  
**P<sub>D</sub> : 1.5 Watts**

### FEATURES :

- \* Complete Voltage Range 3.3 to 200 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* **Pb Free / RoHS Compliant**

### MECHANICAL DATA :

- \* Case: JEDEC SOD-123FL, molded plastic over passivated chip
- \* Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- \* Polarity: Color band denotes cathode end
- \* Mounting position : Any
- \* Weight: 0.02 gram (Approximate)



### MAXIMUM RATINGS

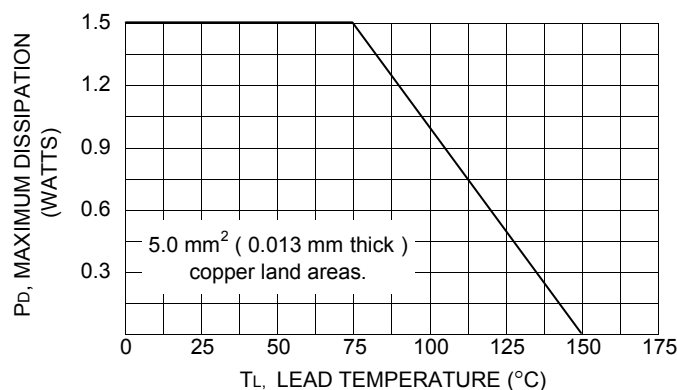
Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T <sub>L</sub> = 75 °C (Note1)	P <sub>D</sub>	1.5	W
Maximum Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	1.5	V
Junction Temperature Range	T <sub>J</sub>	- 55 to + 150	°C
Storage Temperature Range	T <sub>s</sub>	- 55 to + 150	°C

**Note :**

(1) T<sub>L</sub> = Lead temperature at 5.0 mm<sup>2</sup> ( 0.013 mm thick ) copper land areas.

**Fig. 1 POWER TEMPERATURE DERATING CURVE**



## ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type No.	Marking	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
		$V_Z @ I_{ZT}$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$		$I_{ZM}$
		(V)	(mA)	( $\Omega$ )	( $\Omega$ )	(mA)	( $\mu$ A)	(V)	(mA)
SMZ353D	A9	3.3	113.6	10	500	1.0	100	1.0	454
SMZ353G	B9	3.6	104.2	9.0	500	1.0	75	1.0	416
SMZ353J	C9	3.9	96.1	7.5	500	1.0	25	1.0	384
SMZ354D	D9	4.3	87.2	6.0	500	1.0	5.0	1.0	348
SMZ354H	E9	4.7	79.8	5.0	500	1.0	5.0	1.5	319
SMZ355B	F9	5.1	73.5	4.0	350	1.0	5.0	2.0	294
SMZ355G	H9	5.6	66.9	2.0	250	1.0	40	3.0	267
SMZ356C	J9	6.2	60.5	2.0	200	1.0	40	4.0	241
SMZ356I	K9	6.8	55.1	2.5	200	1.0	50	5.2	220
SMZ357F	M9	7.5	50.0	3.0	400	0.5	50	6.0	200
SMZ358C	N9	8.2	45.7	3.5	400	0.5	50	6.5	182
SMZ359B	P9	9.1	41.2	4.0	500	0.5	50	7.0	164
SMZ3510	R9	10	37.5	4.5	500	0.25	50	8.0	150
SMZ3511	X9	11	34.1	5.5	550	0.25	50	8.4	136
SMZ3512	Y9	12	31.2	6.5	550	0.25	1.0	9.1	125
SMZ3513	Z9	13	28.8	7.0	550	0.25	1.0	9.9	115
SMZ3515	A0	15	25.0	9.0	600	0.25	1.0	11.4	100
SMZ3516	B0	16	23.4	10	600	0.25	1.0	12.2	93
SMZ3518	C0	18	20.8	12	650	0.25	1.0	13.7	83
SMZ3520	D0	20	18.7	14	650	0.25	1.0	15.2	75
SMZ3522	E0	22	17.0	17.5	650	0.25	1.0	16.7	68
SMZ3524	F0	24	15.6	19	700	0.25	1.0	18.2	62
SMZ3527	H0	27	13.9	23	700	0.25	1.0	20.6	55
SMZ3530	J0	30	12.5	26	750	0.25	1.0	22.8	50
SMZ3533	K0	33	11.4	33	800	0.25	1.0	25.1	45
SMZ3536	M0	36	10.4	38	850	0.25	1.0	27.4	41
SMZ3539	N0	39	9.6	45	900	0.25	1.0	29.7	38
SMZ3543	P0	43	8.7	53	950	0.25	1.0	32.7	34
SMZ3547	R0	47	8.0	67	1000	0.25	1.0	35.8	31
SMZ3551	X0	51	7.3	70	1100	0.25	1.0	38.8	29
SMZ3556	Y0	56	6.7	86	1300	0.25	1.0	42.6	26
SMZ3562	Z0	62	6.0	100	1500	0.25	1.0	47.1	24
SMZ3568	A1	68	5.5	120	1700	0.25	1.0	51.7	22
SMZ3575	B1	75	5.0	140	2000	0.25	1.0	56.0	20
SMZ3582	C1	82	4.6	160	2500	0.25	1.0	62.2	18
SMZ3591	D1	91	4.1	200	3000	0.25	1.0	69.2	16
SMZ35B0	E1	100	3.7	250	3100	0.25	1.0	76.0	15
SMZ35B1	F1	110	3.4	300	4000	0.25	1.0	83.6	13
SMZ35B2	H1	120	3.1	380	4500	0.25	1.0	91.2	12
SMZ35B3	J1	130	2.9	450	5000	0.25	1.0	98.8	11
SMZ35B5	K1	150	2.5	600	6000	0.25	1.0	114.0	10
SMZ35B6	M1	160	2.3	700	6500	0.25	1.0	121.6	9.0
SMZ35B8	N1	180	2.1	900	7000	0.25	1.0	136.8	8.0
SMZ35D0	P1	200	1.9	1900	9990	0.25	1.0	152.0	7.0

Note : (1) The type number listed have a standard tolerance on the nominal zener voltage of  $\pm 5.0\%$ .