

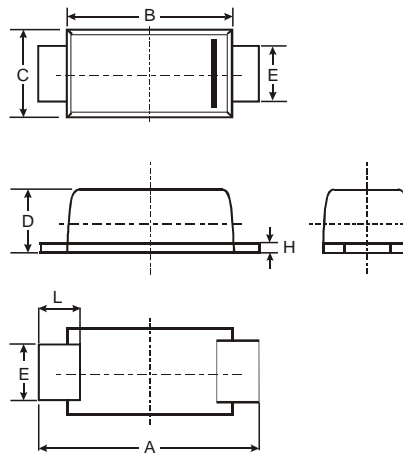
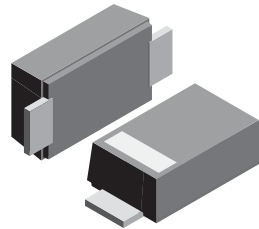
**VOLTAGE RANGE: 3.3 - 200V**  
**POWER: 1.0Watts**

### Features

- High peak reverse power dissipation
- High reliability
- Low leakage current

### Mechanical Data

- Case: SOD-123FL  
plastic body over passivated junction
- Terminals : Plated axial leads,
- solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight: 0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			

### Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at $T_L = 50^\circ\text{C}$ (Note1)	$P_D$	1.0	Watt
Maximum Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\theta JA}$	170	K / W
Junction Temperature Range	$T_J$	- 55 to + 175	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 55 to + 175	$^\circ\text{C}$

**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.



## 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		IzM
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
SMFZ3V3	3.3	76.0	10	400	1.0	100	1.0	276
SMFZ3V6	3.6	69.0	10	400	1.0	100	1.0	252
SMFZ3V9	3.9	64.0	9.0	400	1.0	50	1.0	234
SMFZ4V3	4.3	58.0	9.0	400	1.0	10	1.0	217
SMFZ4V7	4.7	53.0	8.0	500	1.0	10	1.0	193
SMFZ5V1	5.1	49.0	7.0	550	1.0	10	1.0	178
SMFZ5V6	5.6	45.0	5.0	600	1.0	10	2.0	162
SMFZ6V2	6.2	41.0	2.0	700	1.0	10	3.0	146
SMFZ6V8	6.8	37.0	3.5	700	1.0	50	4.0	133
SMFZ7V5	7.5	34.0	4.0	700	0.5	50	5.0	121
SMFZ8V2	8.2	31.0	4.5	700	0.5	50	6.0	110
SMFZ9V1	9.1	28.0	5.0	700	0.5	50	7.0	100
SMFZ10	10	25.0	7.0	700	0.25	50	7.6	91
SMFZ11	11	23.0	8.0	700	0.25	50	8.4	83
SMFZ12	12	21.0	9.0	700	0.25	5.0	9.1	76
SMFZ13	13	19.0	10	700	0.25	5.0	9.9	69
SMFZ15	15	17.0	14	700	0.25	5.0	11.4	61
SMFZ16	16	15.5	16	700	0.25	5.0	12.2	57
SMFZ18	18	14.0	20	750	0.25	5.0	13.7	50
SMFZ20	20	12.5	22	750	0.25	5.0	15.2	45
SMFZ22	22	11.5	23	750	0.25	5.0	16.7	41
SMFZ24	24	10.5	25	750	0.25	5.0	18.2	38
SMFZ27	27	9.5	35	750	0.25	5.0	20.6	34
SMFZ30	30	8.5	40	1000	0.25	5.0	22.8	30
SMFZ33	33	7.5	45	1000	0.25	5.0	25.1	27
SMFZ36	36	7.0	50	1000	0.25	5.0	27.4	25
SMFZ39	39	6.5	60	1000	0.25	5.0	29.7	23
SMFZ43	43	6.0	70	1500	0.25	5.0	32.7	22
SMFZ47	47	5.5	80	1500	0.25	5.0	35.8	19
SMFZ51	51	5.0	95	1500	0.25	5.0	38.8	18
SMFZ56	56	4.5	110	2000	0.25	5.0	42.6	16
SMFZ62	62	4.0	125	2000	0.25	5.0	47.1	14
SMFZ68	68	3.7	150	2000	0.25	5.0	51.7	13
SMFZ75	75	3.3	175	2000	0.25	5.0	56.0	12
SMFZ82	82	3.0	200	3000	0.25	5.0	62.2	11
SMFZ91	91	2.8	250	3000	0.25	5.0	69.2	10
SMFZ100	100	2.5	350	3000	0.25	5.0	76.0	9.0
SMFZ110	110	2.3	450	4000	0.25	5.0	83.6	8.6
SMFZ120	120	2.0	550	4500	0.25	5.0	91.2	7.8
SMFZ130	130	1.9	700	5000	0.25	5.0	98.8	7.0
SMFZ150	150	1.7	1000	6000	0.25	5.0	114.0	6.4
SMFZ160	160	1.6	1100	6500	0.25	5.0	121.6	5.8
SMFZ180	180	1.4	1200	7000	0.25	5.0	136.8	5.2
SMFZ200	200	1.2	1500	8000	0.25	5.0	152.0	4.7