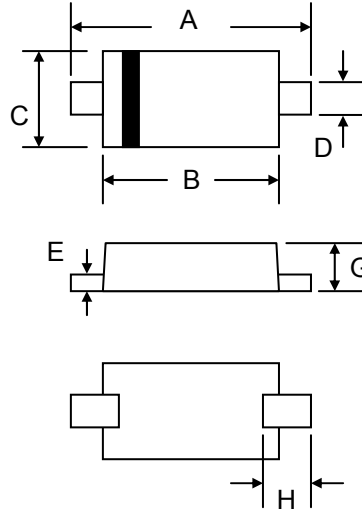


Features

- **Low Profile 1.33mm Max. Case Height**
- 1.0W Power Dissipation
- 3.3V – 330V Nominal Zener Voltage
- 5% Standard Vz Tolerance
- Low Inductance
- For Use in Voltage Regulator or Reference
- Plastic Material – UL Recognition Flammability Classification 94V-0



SOD-123FL		
Dim	Min	Max
A	3.30	3.70
B	2.60	2.95
C	1.65	1.95
D	0.75	1.35
E	0.10	0.20
G	0.93	1.33
H	0.50	0.80
All Dimensions in mm		

Mechanical Data

- Case: SOD-123FL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.017 grams (approx.)
- Marking: Device Code
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 5**

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

Characteristic	Symbol	Value	Unit
Power Dissipation at $T_A = 25^\circ\text{C}$ (Note 1)	P_D	1.0	W
Forward Voltage @ $I_F = 200\text{mA}$	V_F	1.2	V
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	110	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^\circ\text{C}$

Note: 1. Mounted on 25.4 x 25.4 x 1.6mm ceramic substrate with minimum recommended pad layout.

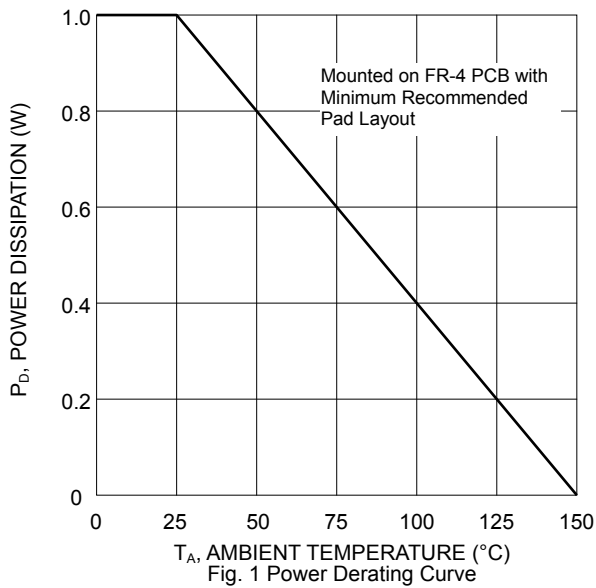


Fig. 1 Power Derating Curve

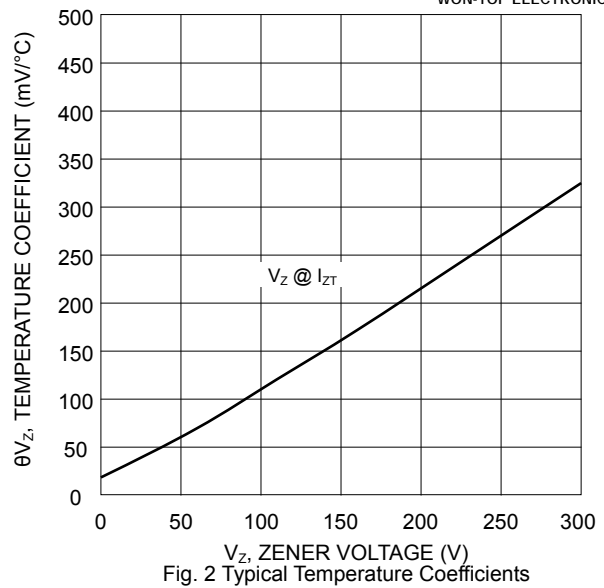


Fig. 2 Typical Temperature Coefficients

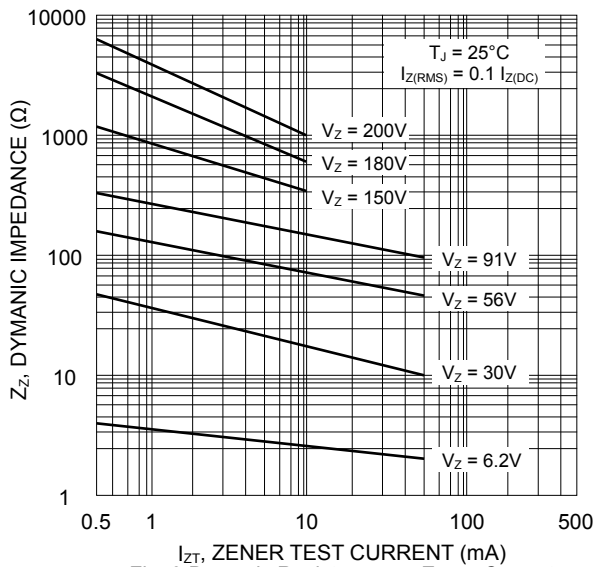


Fig. 3 Dynamic Resistance vs. Zener Current

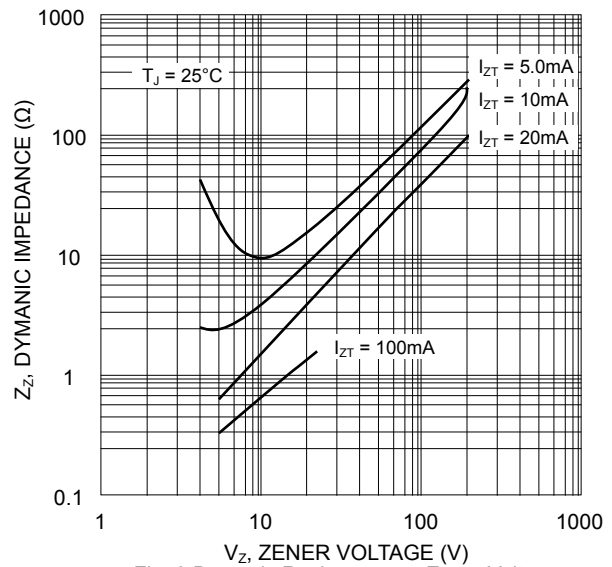


Fig. 3 Dynamic Resistance vs. Zener Voltage

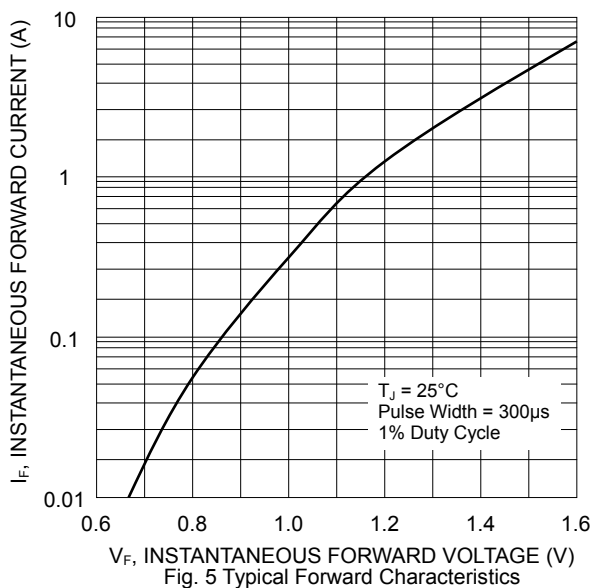


Fig. 5 Typical Forward Characteristics

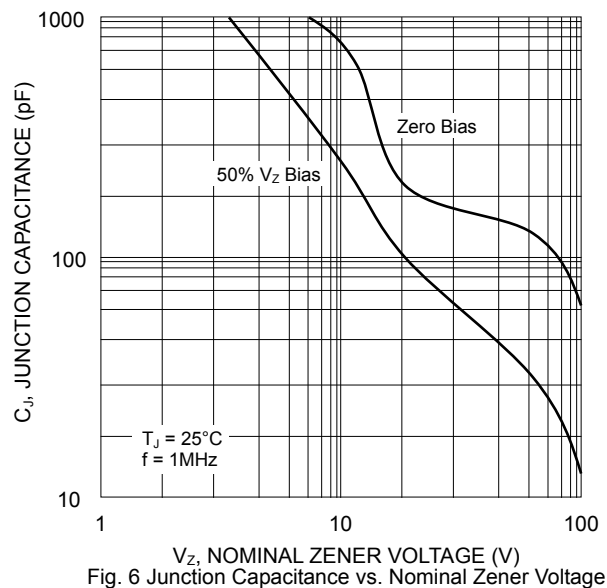


Fig. 6 Junction Capacitance vs. Nominal Zener Voltage

Electrical Characteristics (@T_A=25°C unless otherwise specified) Table 1

Type Number (Note 1)	Device Marking Code	Nominal Zener Voltage (Note 2)	Test Current	Maximum Zener Impedance (Note 3)			Maximum Leakage Current		Max DC Zener Current	Max Surge Current 8.3ms
		V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}	I _{ZS}
		(V)	(mA)	(Ω)	(Ω)	(mA)	(μ A)	(V)	(mA)	(mA)
SML4728A	28A	3.3	76.0	10	400	1.00	100	1.0	276	1380
SML4729A	29A	3.6	69.0	10	400	1.00	100	1.0	252	1260
SML4730A	30A	3.9	64.0	9.0	400	1.00	50	1.0	234	1190
SML4731A	31A	4.3	58.0	9.0	400	1.00	10	1.0	217	1070
SML4732A	32A	4.7	53.0	8.0	500	1.00	10	1.0	193	970
SML4733A	33A	5.1	49.0	7.0	550	1.00	10	1.0	178	890
SML4734A	34A	5.6	45.0	5.0	600	1.00	10	2.0	162	810
SML4735A	35A	6.2	41.0	2.0	700	1.00	10	3.0	146	730
SML4736A	36A	6.8	37.0	3.5	700	1.00	10	4.0	133	660
SML4737A	37A	7.5	34.0	4.0	700	0.50	10	5.0	121	605
SML4738A	38A	8.2	31.0	4.5	700	0.50	10	6.0	110	550
SML4739A	39A	9.1	28.0	5.0	700	0.50	10	7.0	100	500
SML4740A	40A	10	25.0	7.0	700	0.25	10	7.6	91	454
SML4741A	41A	11	23.0	8.0	700	0.25	5	8.4	83	414
SML4742A	42A	12	21.0	9.0	700	0.25	5	9.1	76	380
SML4743A	43A	13	19.0	10	700	0.25	5	9.9	69	344
SML4744A	44A	15	17.0	14	700	0.25	5	11.4	61	304
SML4745A	45A	16	15.5	16	700	0.25	5	12.2	57	285
SML4746A	46A	18	14.0	20	750	0.25	5	13.7	50	250
SML4747A	47A	20	12.5	22	750	0.25	5	15.2	45	225
SML4748A	48A	22	11.5	23	750	0.25	5	16.7	41	205
SML4749A	49A	24	10.5	25	750	0.25	5	18.2	38	190
SML4750A	50A	27	9.5	35	750	0.25	5	20.6	34	170
SML4751A	51A	30	8.5	40	1000	0.25	5	22.8	30	150
SML4752A	52A	33	7.5	45	1000	0.25	5	25.1	27	135
SML4753A	53A	36	7.0	50	1000	0.25	5	27.4	25	125
SML4754A	54A	39	6.5	60	1000	0.25	5	29.7	23	115
SML4755A	55A	43	6.0	70	1500	0.25	5	32.7	22	110
SML4756A	56A	47	5.5	80	1500	0.25	5	35.8	19	95
SML4757A	57A	51	5.0	95	1500	0.25	5	38.8	18	90
SML4758A	58A	56	4.5	110	2000	0.25	5	42.6	16	80
SML4759A	59A	62	4.0	125	2000	0.25	5	47.1	14	70
SML4760A	60A	68	3.7	150	2000	0.25	5	51.7	13	65
SML4761A	61A	75	3.3	175	2000	0.25	5	56.0	12	60
SML4762A	62A	82	3.0	200	3000	0.25	5	62.2	11	55
SML4763A	63A	91	2.8	250	3000	0.25	5	69.2	10	50
SML4764A	64A	100	2.5	350	3000	0.25	5	76.0	9.0	45
SMZ1110A	11Z	110	2.3	450	4000	0.25	5	83.6	8.6	40
SMZ1120A	12Z	120	2.0	550	4500	0.25	5	91.2	7.8	37
SMZ1130A	13Z	130	1.9	700	5000	0.25	5	98.8	7.0	34
SMZ1150A	15Z	150	1.7	1000	6000	0.25	5	114.0	6.4	30
SMZ1160A	16Z	160	1.6	1100	6500	0.25	5	121.6	5.8	28
SMZ1180A	18Z	180	1.4	1200	7000	0.25	5	136.8	5.2	25
SMZ1200A	20Z	200	1.2	1900	9990	0.25	5	152.0	4.7	22
SMZ1220A	22Z	220	1.0	1600	8000	0.25	5	167.2	4.0	20
SMZ1240A	24Z	240	0.9	1800	8500	0.25	5	182.4	3.8	19
SMZ1250A	25Z	250	0.9	2000	9000	0.25	5	190.0	3.6	18
SMZ1270A	27Z	270	0.8	2100	9000	0.25	5	205.0	3.3	16
SMZ1300A	30Z	300	0.8	2300	9500	0.25	5	228.0	3.0	15
SMZ1330A	33Z	330	0.7	2500	9500	0.25	5	250.2	2.7	13

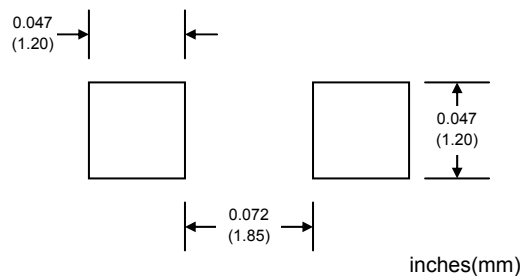
Note: 1. Type numbers listed have standard tolerance on the nominal zener voltage of $\pm 5\%$.
 2. Measured under thermal equilibrium and DC (I_{ZT}) test conditions.
 3. f = 1KHz

MARKING INFORMATION



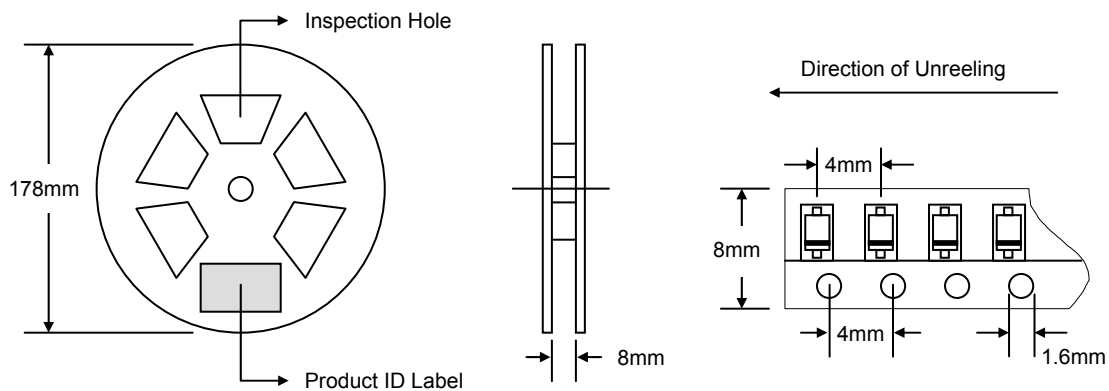
Cathode = Polarity Band
xx = Device Code, See Table 1

RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL




Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	195 x 135 x 195	30,000	370 x 370 x 420	240,000	10.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SML47xxA-T1	SOD-123FL	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SML4728A-T1-LF.**

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Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road,
Chine Chen Dist., Kaohsiung 806, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: <http://www.wontop.com>

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