

# SMF4728-SMF4764

Surface Mount Zener Diodes

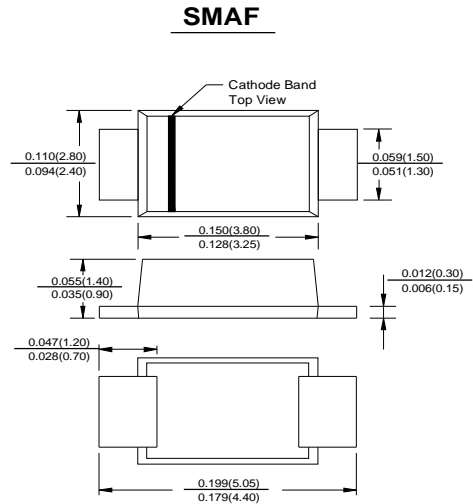
**V<sub>Z</sub> : 3.3 - 100Volts**  
**P<sub>D</sub> : 1 Watt**

## Features

- ✧ Complete voltage range 3.3 to 100 volts
- ✧ High peak reverse power dissipation
- ✧ High reliability
- ✧ Low leakage current
- ✧ Standard zener voltage tolerance is  $\pm 5\%$ .

## Mechanical Data

- ✧ Case: JEDEC SOD-123FL molded plastic over passivated chip
- ✧ Terminals: Solder plated, solderable per MIL-STD-750 Method 2026
- ✧ Polarity: For uni-directional types the band by laser denotes the cathode, which is positive with respect to the anode under normal TVS operation



Dimensions in inches and (millimeters)

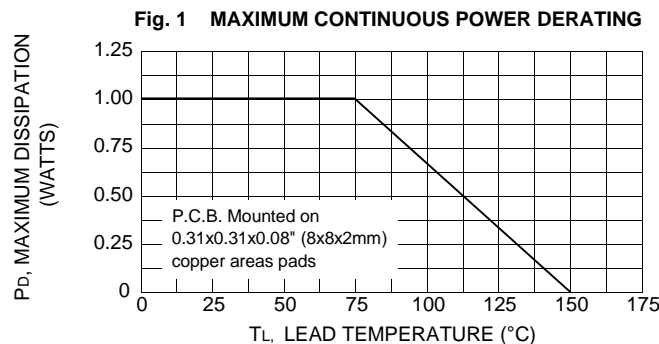
## MAXIMUM RATINGS

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>	1.0	W
Maximum Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	1.2	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) P.C.B. Mounted on 0.31x0.31x0.08" (8x8x2mm) copper areas pads.



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## Surface Mount Zener Diodes

Rating at 25 °C ambient temperature unless otherwise specified

Type	Device Marking	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge Current
		$V_Z @ I_{ZT}$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$		$I_{ZM}$	$I_{RM}^{(2)}$
		(V)	(mA)	( $\Omega$ )	( $\Omega$ )	(mA)	( $\mu$ A)	(V)	(mA)	(mApk)
SMF4728A	4728	3.3	76.0	10	400	1.0	100	1.0	276	1380
SMF4729A	4729	3.6	69.0	10	400	1.0	100	1.0	252	1260
SMF4730A	4730	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
SMF4731A	4731	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
SMF4732A	4732	4.7	53.0	8.0	500	1.0	10	1.0	193	970
SMF4733A	4733	5.1	49.0	7.0	550	1.0	10	1.0	178	890
SMF4734A	4734	5.6	45.0	5.0	600	1.0	10	2.0	162	810
SMF4735A	4735	6.2	41.0	2.0	700	1.0	10	3.0	146	730
SMF4736A	4736	6.8	37.0	3.5	700	1.0	10	4.0	133	660
SMF4737A	4737	7.5	34.0	4.0	700	0.5	10	5.0	121	605
SMF4738A	4738	8.2	31.0	4.5	700	0.5	10	6.0	110	550
SMF4739A	4739	9.1	28.0	5.0	700	0.5	10	7.0	100	500
SMF4740A	4740	10	25.0	7.0	700	0.25	10	7.6	91	454
SMF4741A	4741	11	23.0	8.0	700	0.25	5.0	8.4	83	414
SMF4742A	4742	12	21.0	9.0	700	0.25	5.0	9.1	76	380
SMF4743A	4743	13	19.0	10	700	0.25	5.0	9.9	69	344
SMF4744A	4744	15	17.0	14	700	0.25	5.0	11.4	61	305
SMF4745A	4745	16	15.5	16	700	0.25	5.0	12.2	57	285
SMF4746A	4746	18	14.0	20	750	0.25	5.0	13.7	50	250
SMF4747A	4747	20	12.5	22	750	0.25	5.0	15.2	45	225
SMF4748A	4748	22	11.5	23	750	0.25	5.0	16.7	41	205
SMF4749A	4749	24	10.5	25	750	0.25	5.0	18.2	38	190
SMF4750A	4750	27	9.5	35	750	0.25	5.0	20.6	34	170
SMF4751A	4751	30	8.5	40	1000	0.25	5.0	22.8	30	150
SMF4752A	4752	33	7.5	45	1000	0.25	5.0	25.1	27	135
SMF4753A	4753	36	7.0	50	1000	0.25	5.0	27.4	25	125
SMF4754A	4754	39	6.5	60	1000	0.25	5.0	29.7	23	115
SMF4755A	4755	43	6.0	70	1500	0.25	5.0	32.7	22	110
SMF4756A	4756	47	5.5	80	1500	0.25	5.0	35.8	19	95
SMF4757A	4757	51	5.0	95	1500	0.25	5.0	38.8	18	90
SMF4758A	4758	56	4.5	110	2000	0.25	5.0	42.6	16	80
SMF4759A	4759	62	4.0	125	2000	0.25	5.0	47.1	14	70
SMF4760A	4760	68	3.7	150	2000	0.25	5.0	51.7	13	65
SMF4761A	4761	75	3.3	175	2000	0.25	5.0	56.0	12	60
SMF4762A	4762	82	3.0	200	3000	0.25	5.0	62.2	11	55
SMF4763A	4763	91	2.8	250	3000	0.25	5.0	69.2	10	50
SMF4764A	4764	100	2.5	350	3000	0.25	5.0	76.0	9.0	45

**Notes :**

- (1) The type number listed have a standard tolerance on the nominal zener voltage of  $\pm 5\%$ .
- (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on  $I_{ZT}$  per JEDEC Method