

# 1SMA4728A-1SMA4764A

Surface Mount Zener Diodes

**$V_z$  : 3.3 - 100Volts**

**$P_D$  : 1 Watt**

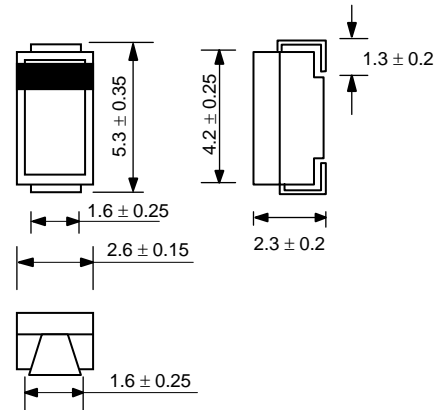
## Features

- ◇ Complete voltage range 3.3 to 100 volts
- ◇ High peak reverse power dissipation
- ◇ High reliability
- ◇ Low leakage current
- ◇ Standard zener voltage tolerance is  $\pm 5\%$ .
- ◇ **Pb / RoHS Free**

## Mechanical Data

- ◇ Case : SMA Molded plastic
- ◇ Epoxy : UL94V-O rate flame retardant
- ◇ Polarity : Color band denotes cathode end
- ◇ Mounting position : Any
- ◇ Weight : 0.060 gram (Approximately)

SMA



Dimensions in millimeters

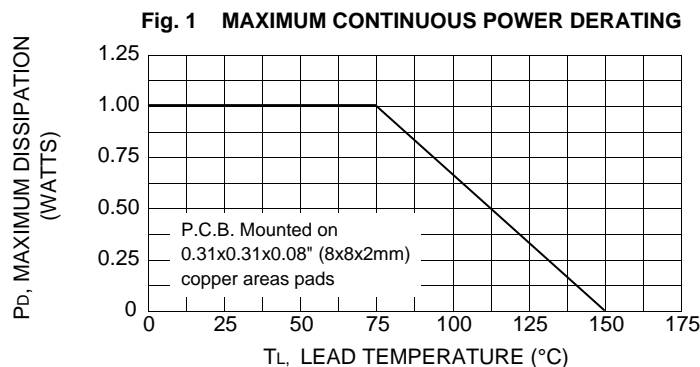
## MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at $T_L = 75\text{ °C}$ (Note1)	$P_D$	1.0	W
Maximum Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1.2	V
Junction Temperature Range	$T_J$	- 55 to + 150	°C
Storage Temperature Range	$T_S$	- 55 to + 150	°C

**Note :**

(1) P.C.B. Mounted on 0.31x0.31x0.08" (8x8x2mm) copper areas pads.



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## ELECTRICAL CHARACTERISTICS

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)
1SMA4728A	4728A	3.3	76.0	10	400	1.0	100	1.0	276	1380
1SMA4729A	4729A	3.6	69.0	10	400	1.0	100	1.0	252	1260
1SMA4730A	4730A	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
1SMA4731A	4731A	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
1SMA4732A	4732A	4.7	53.0	8.0	500	1.0	10	1.0	193	970
1SMA4733A	4733A	5.1	49.0	7.0	550	1.0	10	1.0	178	890
1SMA4734A	4734A	5.6	45.0	5.0	600	1.0	10	2.0	162	810
1SMA4735A	4735A	6.2	41.0	2.0	700	1.0	10	3.0	146	730
1SMA4736A	4736A	6.8	37.0	3.5	700	1.0	10	4.0	133	660
1SMA4737A	4737A	7.5	34.0	4.0	700	0.5	10	5.0	121	605
1SMA4738A	4738A	8.2	31.0	4.5	700	0.5	10	6.0	110	550
1SMA4739A	4739A	9.1	28.0	5.0	700	0.5	10	7.0	100	500
1SMA4740A	4740A	10	25.0	7.0	700	0.25	10	7.6	91	454
1SMA4741A	4741A	11	23.0	8.0	700	0.25	5.0	8.4	83	414
1SMA4742A	4742A	12	21.0	9.0	700	0.25	5.0	9.1	76	380
1SMA4743A	4743A	13	19.0	10	700	0.25	5.0	9.9	69	344
1SMA4744A	4744A	15	17.0	14	700	0.25	5.0	11.4	61	305
1SMA4745A	4745A	16	15.5	16	700	0.25	5.0	12.2	57	285
1SMA4746A	4746A	18	14.0	20	750	0.25	5.0	13.7	50	250
1SMA4747A	4747A	20	12.5	22	750	0.25	5.0	15.2	45	225
1SMA4748A	4748A	22	11.5	23	750	0.25	5.0	16.7	41	205
1SMA4749A	4749A	24	10.5	25	750	0.25	5.0	18.2	38	190
1SMA4750A	4750A	27	9.5	35	750	0.25	5.0	20.6	34	170
1SMA4751A	4751A	30	8.5	40	1000	0.25	5.0	22.8	30	150
1SMA4752A	4752A	33	7.5	45	1000	0.25	5.0	25.1	27	135
1SMA4753A	4753A	36	7.0	50	1000	0.25	5.0	27.4	25	125
1SMA4754A	4754A	39	6.5	60	1000	0.25	5.0	29.7	23	115
1SMA4755A	4755A	43	6.0	70	1500	0.25	5.0	32.7	22	110
1SMA4756A	4756A	47	5.5	80	1500	0.25	5.0	35.8	19	95
1SMA4757A	4757A	51	5.0	95	1500	0.25	5.0	38.8	18	90
1SMA4758A	4758A	56	4.5	110	2000	0.25	5.0	42.6	16	80
1SMA4759A	4759A	62	4.0	125	2000	0.25	5.0	47.1	14	70
1SMA4760A	4760A	68	3.7	150	2000	0.25	5.0	51.7	13	65
1SMA4761A	4761A	75	3.3	175	2000	0.25	5.0	56.0	12	60
1SMA4762A	4762A	82	3.0	200	3000	0.25	5.0	62.2	11	55
1SMA4763A	4763A	91	2.8	250	3000	0.25	5.0	69.2	10	50
1SMA4764A	4764A	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