

1SMA4728 -1SMA4764

SURFACE MOUNT ZENER DIODES

V_Z : 3.3 - 100Volts

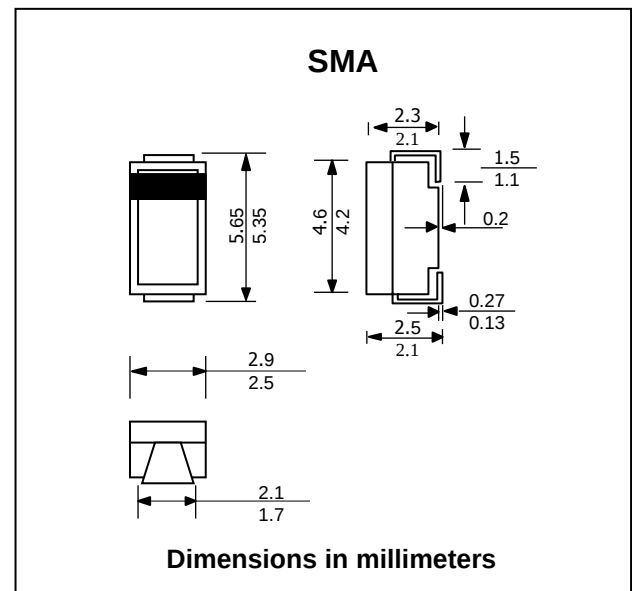
P_D : 1 Watt

FEATURES :

- * Complete voltage range 3.3 to 100 volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current
- * Standard zener voltage tolerance is $\pm 10\%$.
- * **Pb / RoHS Free**

MECHANICAL DATA

- * Case : SMA Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.060 gram (Approximately)

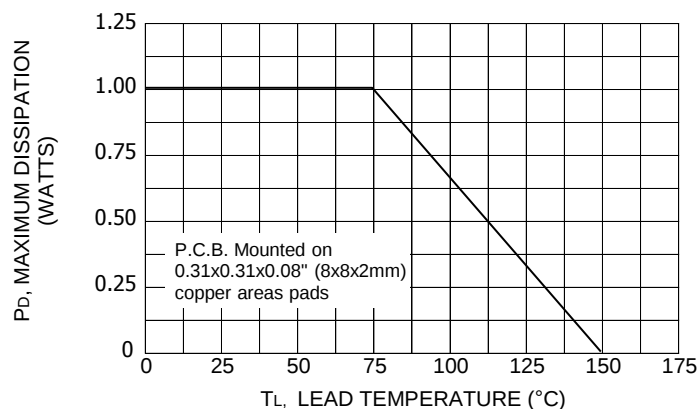


MAXIMUM RATINGS (Rating at 25 °C ambient temperature unless otherwise specified)

Rating	Symbol	Value	Unit
DC Power Dissipation at T _L = 75 °C (Note1)	P _D	1.0	W
Maximum Forward Voltage at I _F = 200 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.

Fig. 1 MAXIMUM CONTINUOUS POWER DERATING



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)	(Ω)	(Ω)	(mA)	(μ A)	(V)	(mA)	(mA _{pk})
1SMA4728	4728	3.3	76.0	10	400	1.0	100	1.0	276	1380
1SMA4729	4729	3.6	69.0	10	400	1.0	100	1.0	252	1260
1SMA4730	4730	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
1SMA4731	4731	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
1SMA4732	4732	4.7	53.0	8.0	500	1.0	10	1.0	193	970
1SMA4733	4733	5.1	49.0	7.0	550	1.0	10	1.0	178	890
1SMA4734	4734	5.6	45.0	5.0	600	1.0	10	2.0	162	810
1SMA4735	4735	6.2	41.0	2.0	700	1.0	10	3.0	146	730
1SMA4736	4736	6.8	37.0	3.5	700	1.0	10	4.0	133	660
1SMA4737	4737	7.5	34.0	4.0	700	0.5	10	5.0	121	605
1SMA4738	4738	8.2	31.0	4.5	700	0.5	10	6.0	110	550
1SMA4739	4739	9.1	28.0	5.0	700	0.5	10	7.0	100	500
1SMA4740	4740	10	25.0	7.0	700	0.25	10	7.6	91	454
1SMA4741	4741	11	23.0	8.0	700	0.25	5.0	8.4	83	414
1SMA4742	4742	12	21.0	9.0	700	0.25	5.0	9.1	76	380
1SMA4743	4743	13	19.0	10	700	0.25	5.0	9.9	69	344
1SMA4744	4744	15	17.0	14	700	0.25	5.0	11.4	61	305
1SMA4745	4745	16	15.5	16	700	0.25	5.0	12.2	57	285
1SMA4746	4746	18	14.0	20	750	0.25	5.0	13.7	50	250
1SMA4747	4747	20	12.5	22	750	0.25	5.0	15.2	45	225
1SMA4748	4748	22	11.5	23	750	0.25	5.0	16.7	41	205
1SMA4749	4749	24	10.5	25	750	0.25	5.0	18.2	38	190
1SMA4750	4750	27	9.5	35	750	0.25	5.0	20.6	34	170
1SMA4751	4751	30	8.5	40	1000	0.25	5.0	22.8	30	150
1SMA4752	4752	33	7.5	45	1000	0.25	5.0	25.1	27	135
1SMA4753	4753	36	7.0	50	1000	0.25	5.0	27.4	25	125
1SMA4754	4754	39	6.5	60	1000	0.25	5.0	29.7	23	115
1SMA4755	4755	43	6.0	70	1500	0.25	5.0	32.7	22	110
1SMA4756	4756	47	5.5	80	1500	0.25	5.0	35.8	19	95
1SMA4757	4757	51	5.0	95	1500	0.25	5.0	38.8	18	90
1SMA4758	4758	56	4.5	110	2000	0.25	5.0	42.6	16	80
1SMA4759	4759	62	4.0	125	2000	0.25	5.0	47.1	14	70
1SMA4760	4760	68	3.7	150	2000	0.25	5.0	51.7	13	65
1SMA4761	4761	75	3.3	175	2000	0.25	5.0	56.0	12	60
1SMA4762	4762	82	3.0	200	3000	0.25	5.0	62.2	11	55
1SMA4763	4763	91	2.8	250	3000	0.25	5.0	69.2	10	50
1SMA4764	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 $\pm 10\%$.
- (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