

# SML4728 - SML4764

# SURFACE MOUNT SILICON ZENER DIODES

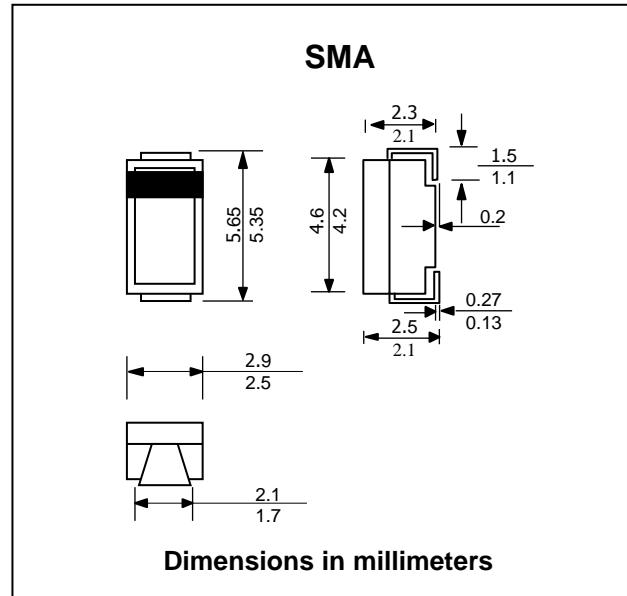
**V<sub>Z</sub> : 3.3 - 100 Volts**  
**P<sub>D</sub> : 1 Watt**

### FEATURES :

- \* Complete Voltage Range 3.3 to 100 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* 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)



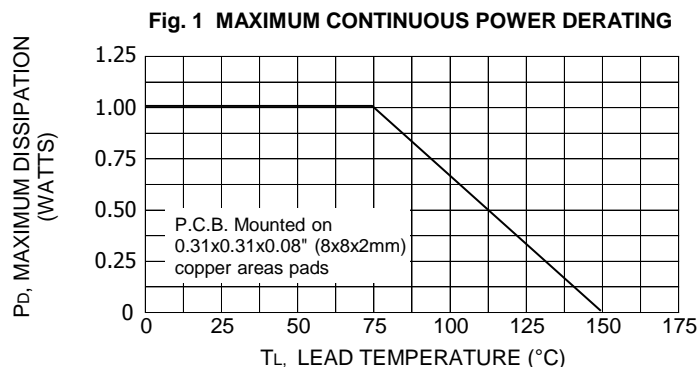
### MAXIMUM RATINGS

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>STG</sub>	- 55 to + 150	°C

#### Note :

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



## 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	Maximum Surge Current
	Vz <sup>(1)</sup> @ IZT	IZT	ZzT @ IZT	Zzk @ Izk	Izk	IR @ VR		IZM	IRM <sup>(2)</sup>
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mApk)
SML4728	3.3	76.0	10	400	1.0	100	1.0	276	1380
SML4729	3.6	69.0	10	400	1.0	100	1.0	252	1260
SML4730	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
SML4731	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
SML4732	4.7	53.0	8.0	500	1.0	10	1.0	193	970
SML4733	5.1	49.0	7.0	550	1.0	10	1.0	178	890
SML4734	5.6	45.0	5.0	600	1.0	10	2.0	162	810
SML4735	6.2	41.0	2.0	700	1.0	10	3.0	146	730
SML4736	6.8	37.0	3.5	700	1.0	10	4.0	133	660
SML4737	7.5	34.0	4.0	700	0.5	10	5.0	121	605
SML4738	8.2	31.0	4.5	700	0.5	10	6.0	110	550
SML4739	9.1	28.0	5.0	700	0.5	10	7.0	100	500
SML4740	10	25.0	7.0	700	0.25	10	7.6	91	454
SML4741	11	23.0	8.0	700	0.25	5.0	8.4	83	414
SML4742	12	21.0	9.0	700	0.25	5.0	9.1	76	380
SML4743	13	19.0	10	700	0.25	5.0	9.9	69	344
SML4744	15	17.0	14	700	0.25	5.0	11.4	61	305
SML4745	16	15.5	16	700	0.25	5.0	12.2	57	285
SML4746	18	14.0	20	750	0.25	5.0	13.7	50	250
SML4747	20	12.5	22	750	0.25	5.0	15.2	45	225
SML4748	22	11.5	23	750	0.25	5.0	16.7	41	205
SML4749	24	10.5	25	750	0.25	5.0	18.2	38	190
SML4750	27	9.5	35	750	0.25	5.0	20.6	34	170
SML4751	30	8.5	40	1000	0.25	5.0	22.8	30	150
SML4752	33	7.5	45	1000	0.25	5.0	25.1	27	135
SML4753	36	7.0	50	1000	0.25	5.0	27.4	25	125
SML4754	39	6.5	60	1000	0.25	5.0	29.7	23	115
SML4755	43	6.0	70	1500	0.25	5.0	32.7	22	110
SML4756	47	5.5	80	1500	0.25	5.0	35.8	19	95
SML4757	51	5.0	95	1500	0.25	5.0	38.8	18	90
SML4758	56	4.5	110	2000	0.25	5.0	42.6	16	80
SML4759	62	4.0	125	2000	0.25	5.0	47.1	14	70
SML4760	68	3.7	150	2000	0.25	5.0	51.7	13	65
SML4761	75	3.3	175	2000	0.25	5.0	56.0	12	60
SML4762	82	3.0	200	3000	0.25	5.0	62.2	11	55
SML4763	91	2.8	250	3000	0.25	5.0	69.2	10	50
SML4764	100	2.5	350	3000	0.25	5.0	76.0	9.0	45

**Notes :**

(1) Standard voltage tolerance is ±10%, Suffix A ± 5%

(2) Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC Method

(3) " SML " will be omitted in marking on the diode.