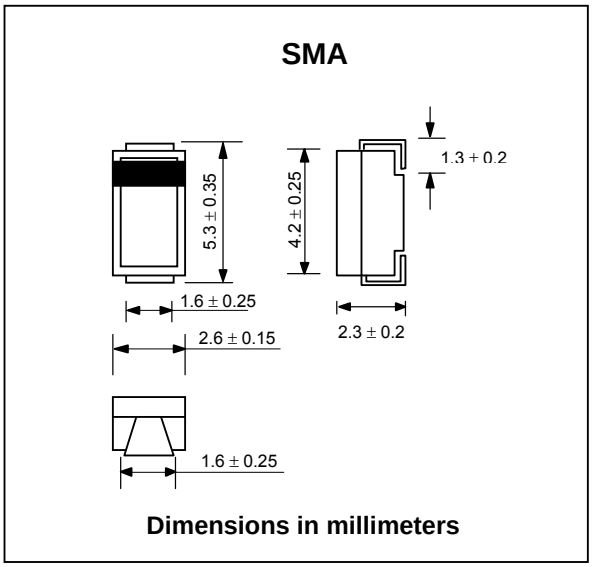
SML4728A - SML4764A

SURFACE MOUNT SILICON ZENER DIODES

V_Z : 3.3 - 100 Volts
P_D : 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

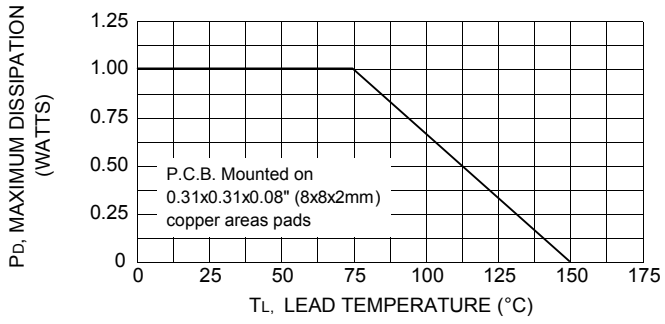
Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T_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_{STG}	- 55 to + 150	°C

Note :

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

Fig. 1 MAXIMUM CONTINUOUS POWER DERATING



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
	V_Z [1] @ 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)	(μA)	(V)	(mA)	(mApk)
SML4728A	3.3	76.0	10	400	1.0	100	1.0	276	1380
SML4729A	3.6	69.0	10	400	1.0	100	1.0	252	1260
SML4730A	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
SML4731A	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
SML4732A	4.7	53.0	8.0	500	1.0	10	1.0	193	970
SML4733A	5.1	49.0	7.0	550	1.0	10	1.0	178	890
SML4734A	5.6	45.0	5.0	600	1.0	10	2.0	162	810
SML4735A	6.2	41.0	2.0	700	1.0	10	3.0	146	730
SML4736A	6.8	37.0	3.5	700	1.0	10	4.0	133	660
SML4737A	7.5	34.0	4.0	700	0.5	10	5.0	121	605
SML4738A	8.2	31.0	4.5	700	0.5	10	6.0	110	550
SML4739A	9.1	28.0	5.0	700	0.5	10	7.0	100	500
SML4740A	10	25.0	7.0	700	0.25	10	7.6	91	454
SML4741A	11	23.0	8.0	700	0.25	5.0	8.4	83	414
SML4742A	12	21.0	9.0	700	0.25	5.0	9.1	76	380
SML4743A	13	19.0	10	700	0.25	5.0	9.9	69	344
SML4744A	15	17.0	14	700	0.25	5.0	11.4	61	305
SML4745A	16	15.5	16	700	0.25	5.0	12.2	57	285
SML4746A	18	14.0	20	750	0.25	5.0	13.7	50	250
SML4747A	20	12.5	22	750	0.25	5.0	15.2	45	225
SML4748A	22	11.5	23	750	0.25	5.0	16.7	41	205
SML4749A	24	10.5	25	750	0.25	5.0	18.2	38	190
SML4750A	27	9.5	35	750	0.25	5.0	20.6	34	170
SML4751A	30	8.5	40	1000	0.25	5.0	22.8	30	150
SML4752A	33	7.5	45	1000	0.25	5.0	25.1	27	135
SML4753A	36	7.0	50	1000	0.25	5.0	27.4	25	125
SML4754A	39	6.5	60	1000	0.25	5.0	29.7	23	115
SML4755A	43	6.0	70	1500	0.25	5.0	32.7	22	110
SML4756A	47	5.5	80	1500	0.25	5.0	35.8	19	95
SML4757A	51	5.0	95	1500	0.25	5.0	38.8	18	90
SML4758A	56	4.5	110	2000	0.25	5.0	42.6	16	80
SML4759A	62	4.0	125	2000	0.25	5.0	47.1	14	70
SML4760A	68	3.7	150	2000	0.25	5.0	51.7	13	65
SML4761A	75	3.3	175	2000	0.25	5.0	56.0	12	60
SML4762A	82	3.0	200	3000	0.25	5.0	62.2	11	55
SML4763A	91	2.8	250	3000	0.25	5.0	69.2	10	50
SML4764A	100	2.5	350	3000	0.25	5.0	76.0	9.0	45

Notes :

(1) Standard voltage tolerance is± 5%, No Suffix ± 10%

(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.