Certificate Number: Q10561

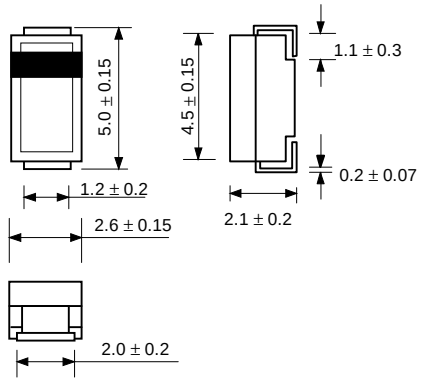
Certificate Number: E17276

1SMA4728A-1SMA4764A

SURFACE MOUNT ZENER DIODES

V_Z : 3.3 - 100Volts
P_D : 1 Watt

SMA (DO-214AC)



Dimensions in millimeter

FEATURES :

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

MECHANICAL DATA

* Case : SMA (DO-214AC) Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Lead formed for Surface mount
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.064 gram

MAXIMUM RATINGS

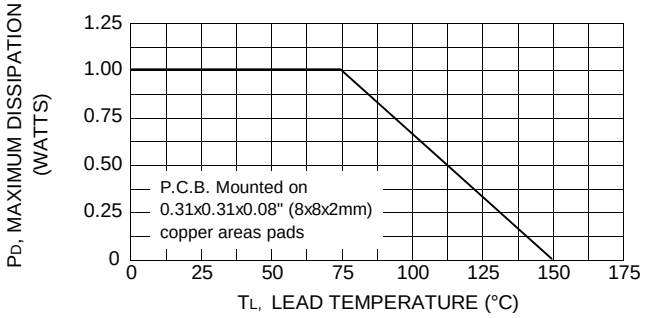
Rating at 25 °C ambient temperature unless otherwise specified

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	Ts	- 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)	(μA)	(V)	(mA)	(mApk)
1SMA4728A	**728A**	3.3	76.0	10	400	1.0	100	1.0	276	1380
1SMA4729A	**729A**	3.6	69.0	10	400	1.0	100	1.0	252	1260
1SMA4730A	**730A**	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
1SMA4731A	**731A**	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
1SMA4732A	**732A**	4.7	53.0	8.0	500	1.0	10	1.0	193	970
1SMA4733A	**733A**	5.1	49.0	7.0	550	1.0	10	1.0	178	890
1SMA4734A	**734A**	5.6	45.0	5.0	600	1.0	10	2.0	162	810
1SMA4735A	**735A**	6.2	41.0	2.0	700	1.0	10	3.0	146	730
1SMA4736A	**736A**	6.8	37.0	3.5	700	1.0	50	4.0	133	660
1SMA4737A	**737A**	7.5	34.0	4.0	700	0.5	50	5.0	121	605
1SMA4738A	**738A**	8.2	31.0	4.5	700	0.5	50	6.0	110	550
1SMA4739A	**739A**	9.1	28.0	5.0	700	0.5	50	7.0	100	500
1SMA4740A	**740A**	10	25.0	7.0	700	0.25	50	7.6	91	454
1SMA4741A	**741A**	11	23.0	8.0	700	0.25	50	8.4	83	414
1SMA4742A	**742A**	12	21.0	9.0	700	0.25	5.0	9.1	76	380
1SMA4743A	**743A**	13	19.0	10	700	0.25	5.0	9.9	69	344
1SMA4744A	**744A**	15	17.0	14	700	0.25	5.0	11.4	61	305
1SMA4745A	**745A**	16	15.5	16	700	0.25	5.0	12.2	57	285
1SMA4746A	**746A**	18	14.0	20	750	0.25	5.0	13.7	50	250
1SMA4747A	**747A**	20	12.5	22	750	0.25	5.0	15.2	45	225
1SMA4748A	**748A**	22	11.5	23	750	0.25	5.0	16.7	41	205
1SMA4749A	**749A**	24	10.5	25	750	0.25	5.0	18.2	38	190
1SMA4750A	**750A**	27	9.5	35	750	0.25	5.0	20.6	34	170
1SMA4751A	**751A**	30	8.5	40	1000	0.25	5.0	22.8	30	150
1SMA4752A	**752A**	33	7.5	45	1000	0.25	5.0	25.1	27	135
1SMA4753A	**753A**	36	7.0	50	1000	0.25	5.0	27.4	25	125
1SMA4754A	**754A**	39	6.5	60	1000	0.25	5.0	29.7	23	115
1SMA4755A	**755A**	43	6.0	70	1500	0.25	5.0	32.7	22	110
1SMA4756A	**756A**	47	5.5	80	1500	0.25	5.0	35.8	19	95
1SMA4757A	**757A**	51	5.0	95	1500	0.25	5.0	38.8	18	90
1SMA4758A	**758A**	56	4.5	110	2000	0.25	5.0	42.6	16	80
1SMA4759A	**759A**	62	4.0	125	2000	0.25	5.0	47.1	14	70
1SMA4760A	**760A**	68	3.7	150	2000	0.25	5.0	51.7	13	65
1SMA4761A	**761A**	75	3.3	175	2000	0.25	5.0	56.0	12	60
1SMA4762A	**762A**	82	3.0	200	3000	0.25	5.0	62.2	11	55
1SMA4763A	**763A**	91	2.8	250	3000	0.25	5.0	69.2	10	50
1SMA4764A	**764A**	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 ± 5%.

(2) The revese surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC Method