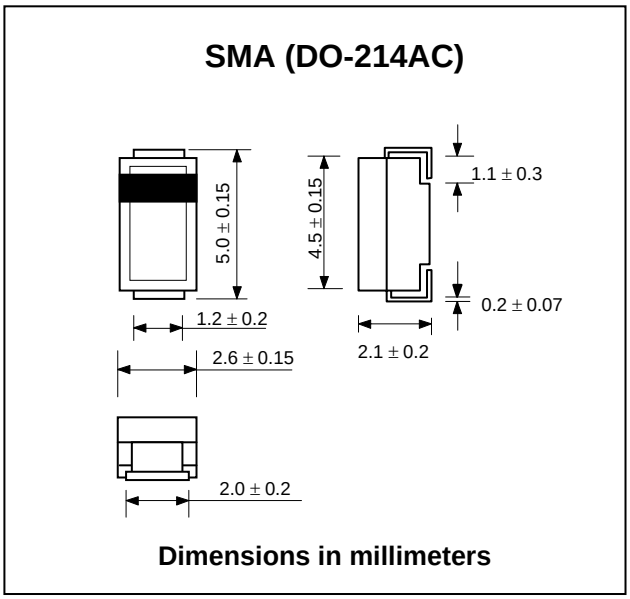
SZ103D - SZ10E0

SURFACE MOUNT SILICON ZENER DIODES

V_Z : 3.3 - 300 Volts
P_D : 1 Watt



FEATURES :

* Complete Voltage Range 3.3 to 300 Volts
* High peak reverse power dissipation
* High reliability
* Low leakage current
* 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

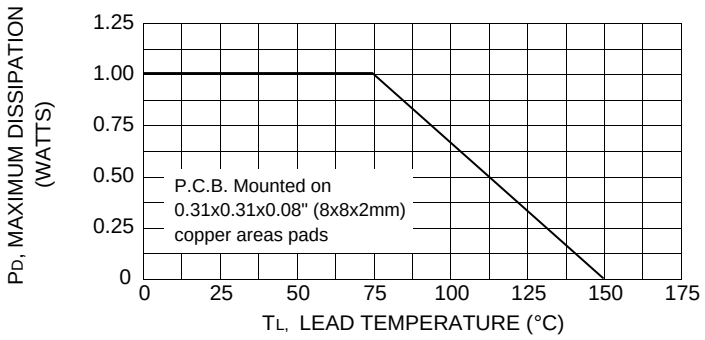
Rating at 25 °C ambient temperature unless otherwise specified

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 pad

Fig. 1 MAXIMUM CONTINUOUS POWER DERATING



ELECTRICAL CHARACTERISTICS (Ta = 25 °C 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)
SZ103D	3.3	76.0	10	400	1.0	100	1.0	276	1380
SZ103G	3.6	69.0	10	400	1.0	100	1.0	252	1260
SZ103J	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
SZ104D	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
SZ104H	4.7	53.0	8.0	500	1.0	10	1.0	193	970
SZ105B	5.1	49.0	7.0	550	1.0	10	1.0	178	890
SZ105G	5.6	45.0	5.0	600	1.0	10	2.0	162	810
SZ106C	6.2	41.0	2.0	700	1.0	10	3.0	146	730
SZ106I	6.8	37.0	3.5	700	1.0	10	4.0	133	660
SZ107F	7.5	34.0	4.0	700	0.5	10	5.0	121	605
SZ108C	8.2	31.0	4.5	700	0.5	10	6.0	110	550
SZ109B	9.1	28.0	5.0	700	0.5	10	7.0	100	500
SZ1010	10	25.0	7.0	700	0.25	10	7.6	91	454
SZ1011	11	23.0	8.0	700	0.25	5.0	8.4	83	414
SZ1012	12	21.0	9.0	700	0.25	5.0	9.1	76	380
SZ1013	13	19.0	10	700	0.25	5.0	9.9	69	344
SZ1015	15	17.0	14	700	0.25	5.0	11.4	61	305
SZ1016	16	15.5	16	700	0.25	5.0	12.2	57	285
SZ1018	18	14.0	20	750	0.25	5.0	13.7	50	250
SZ1020	20	12.5	22	750	0.25	5.0	15.2	45	225
SZ1022	22	11.5	23	750	0.25	5.0	16.7	41	205
SZ1024	24	10.5	25	750	0.25	5.0	18.2	38	190
SZ1027	27	9.5	35	750	0.25	5.0	20.6	34	170
SZ1030	30	8.5	40	1000	0.25	5.0	22.8	30	150
SZ1033	33	7.5	45	1000	0.25	5.0	25.1	27	135
SZ1036	36	7.0	50	1000	0.25	5.0	27.4	25	125
SZ1039	39	6.5	60	1000	0.25	5.0	29.7	23	115
SZ1043	43	6.0	70	1500	0.25	5.0	32.7	22	110
SZ1047	47	5.5	80	1500	0.25	5.0	35.8	19	95
SZ1051	51	5.0	95	1500	0.25	5.0	38.8	18	90
SZ1056	56	4.5	110	2000	0.25	5.0	42.6	16	80
SZ1062	62	4.0	125	2000	0.25	5.0	47.1	14	70
SZ1068	68	3.7	150	2000	0.25	5.0	51.7	13	65
SZ1075	75	3.3	175	2000	0.25	5.0	56.0	12	60
SZ1082	82	3.0	200	3000	0.25	5.0	62.2	11	55
SZ1091	91	2.8	250	3000	0.25	5.0	69.2	10	50
SZ10B0	100	2.5	350	3000	0.25	5.0	76.0	9.0	45
SZ10B1	110	2.3	450	4000	0.25	5.0	83.6	8.6	40
SZ10B2	120	2.0	550	4500	0.25	5.0	91.2	7.8	37
SZ10B3	130	1.9	700	5000	0.25	5.0	98.8	7.0	34
SZ10B5	150	1.7	1000	6000	0.25	5.0	114.0	6.4	30
SZ10B6	160	1.6	1100	6500	0.25	5.0	121.6	5.8	28
SZ10B8	180	1.4	1200	7000	0.25	5.0	136.8	5.2	25
SZ10D0	200	1.2	1900	9990	0.25	5.0	152.0	4.7	22
SZ10D2	220	1.0	1600	8000	0.25	5.0	167.2	4.0	20
SZ10D4	240	0.93	1800	8500	0.25	5.0	182.4	3.8	18.5
SZ10D5	250	0.90	2000	9000	0.25	5.0	190	3.6	18
SZ10D7	270	0.82	2100	9000	0.25	5.0	205	3.3	16.5
SZ10E0	300	0.75	2300	9500	0.25	5.0	228	3.0	15

Notes :

(1) The type number listed have a standard tolerance on the nominal zener voltage of ±10%, altered the fourth number of type from " 0 " for±10% tolerance to be " 5 " for ±5.0% tolerance.

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

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