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SZ605B - SZ60D0

SURFACE MOUNT SILICON ZENER DIODES

V_Z : 5.1 - 200 Volts
P_D : 5 Watts

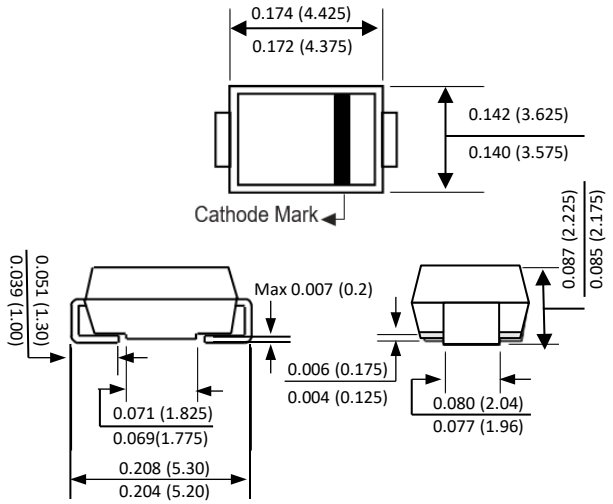
FEATURES :

* Complete Voltage Range 5.1 to 200 Volts
* High peak reverse power dissipation
* High reliability
* Low leakage current
* Pb / RoHS Free

MECHANICAL DATA

* Case : SMB Molded plastic
* Epoxy : UL94V-0 rate flame retardant
* Lead : Lead Formed for Surface Mount
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.108 gram

SMB (DO-214AA)



Dimensions in inches and (millimeters)

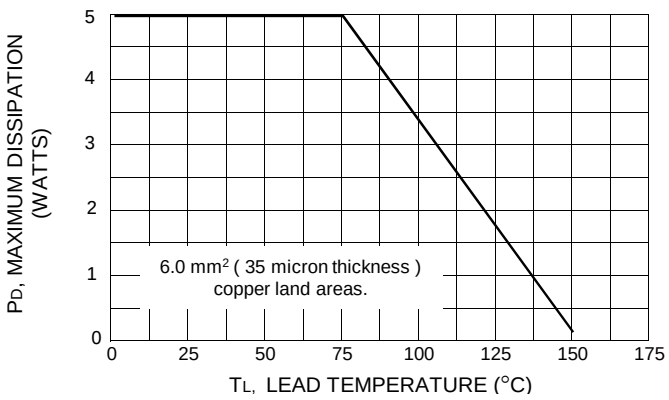
MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 75 °C (Note1)	P_D	5.0	W
Maximum Forward Voltage at I_F = 1.0 A	V_F	1.2	V
Junction Temperature Range	T_J	- 55 to + 150	°C
Storage Temperature Range	Ts	- 55 to + 150	°C

Note : (1) T_L = Lead temperature at 6.0 mm^2 (35 micron thickness) copper land areas.

Fig. 1 POWER TEMPERATURE DERATING CURVE



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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
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R @ V_R		I_{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
SZ605B	5.1	240	1.5	400	1.0	1.0	1.0	930
SZ605G	5.6	220	1.0	400	1.0	1.0	2.0	865
SZ606A	6.0	200	1.0	300	1.0	1.0	3.0	790
SZ606C	6.2	200	1.0	200	1.0	1.0	3.0	765
SZ606I	6.8	175	1.0	200	1.0	10	4.9	700
SZ607F	7.5	175	1.5	200	1.0	10	5.4	630
SZ608C	8.2	150	1.5	200	1.0	10	5.9	580
SZ608H	8.7	150	2.0	200	1.0	10	6.25	545
SZ609B	9.1	150	2.0	150	1.0	7.5	6.6	520
SZ6010	10	125	2.0	125	1.0	5.0	7.2	475
SZ6011	11	125	2.5	125	1.0	5.0	8.0	430
SZ6012	12	100	2.5	125	1.0	2.0	8.6	395
SZ6013	13	100	2.5	100	1.0	1.0	9.4	365
SZ6014	14	100	2.5	75	1.0	1.0	10.1	340
SZ6015	15	75	2.5	75	1.0	1.0	10.8	315
SZ6016	16	75	2.5	75	1.0	1.0	11.5	295
SZ6017	17	70	2.5	75	1.0	0.5	12.2	280
SZ6018	18	65	2.5	75	1.0	0.5	13.0	265
SZ6019	19	65	3.0	75	1.0	0.5	13.7	250
SZ6020	20	65	3.0	75	1.0	0.5	14.4	237
SZ6022	22	50	3.5	75	1.0	0.5	15.8	216
SZ6024	24	50	3.5	100	1.0	0.5	17.3	198
SZ6025	25	50	4.0	110	1.0	0.5	18.0	190
SZ6027	27	50	5.0	120	1.0	0.5	19.4	176
SZ6028	28	50	6.0	130	1.0	0.5	20.1	170
SZ6030	30	40	8.0	140	1.0	0.5	21.6	158
SZ6033	33	40	10	150	1.0	0.5	23.8	144
SZ6036	36	30	11	160	1.0	0.5	25.9	132
SZ6039	39	30	14	170	1.0	0.5	28.1	122
SZ6043	43	30	20	190	1.0	0.5	31.0	110
SZ6047	47	25	25	210	1.0	0.5	33.8	100
SZ6051	51	25	27	230	1.0	0.5	36.7	93.0
SZ6056	56	20	35	280	1.0	0.5	40.3	86.0
SZ6060	60	20	40	350	1.0	0.5	43.0	79.0
SZ6062	62	20	42	400	1.0	0.5	44.6	76.0
SZ6068	68	20	44	500	1.0	0.5	49.0	70.0
SZ6075	75	20	45	620	1.0	0.5	54.0	63.0
SZ6082	82	15	65	720	1.0	0.5	59.0	58.0
SZ6087	87	15	75	760	1.0	0.5	63.0	54.5
SZ6091	91	15	75	760	1.0	0.5	65.5	52.5
SZ60B0	100	12	90	800	1.0	0.5	72.0	47.5
SZ60B1	110	12	125	1000	1.0	0.5	79.2	43.0
SZ60B2	120	10	170	1150	1.0	0.5	86.4	39.5
SZ60B3	130	10	190	1250	1.0	0.5	93.2	36.6
SZ60B4	140	8.0	230	1500	1.0	0.5	101	34.0
SZ60B5	150	8.0	330	1500	1.0	0.5	108	31.6
SZ60B6	160	8.0	350	1650	1.0	0.5	115	29.4
SZ60B7	170	8.0	380	1750	1.0	0.5	122	28.0
SZ60B8	180	5.0	430	1750	1.0	0.5	130	26.4
SZ60B9	190	5.0	450	1850	1.0	0.5	137	25.0
SZ60D0	200	5.0	480	1850	1.0	0.5	144	23.6

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

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