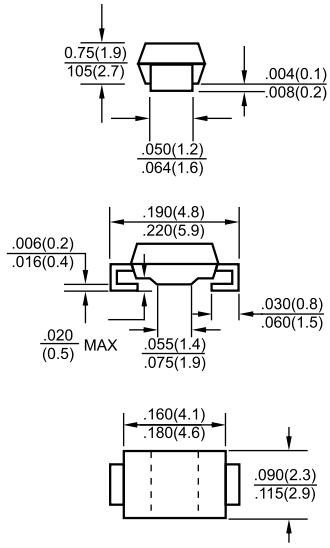
SZ252H-SZ25D0

Surface Mount Silicon Zener Diodes



V_Z : 2.7 - 200 Volts
P_D : 1.3 Watts

SMA/DO-214AC



Dimensions in inches and (millimeters)

Features

- ✧ Complete Voltage Range 2.7 to 200 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

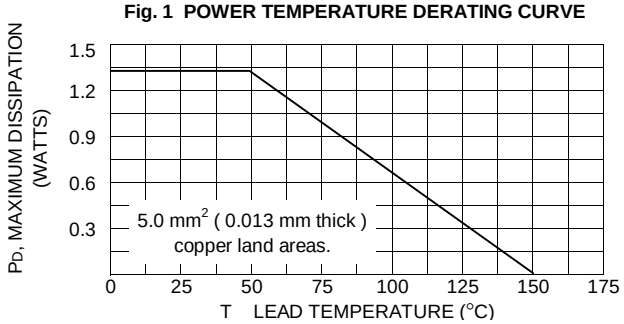
Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 50 °C (Note1)	P_D	1.3	Watts
Maximum Forward Voltage at I_F = 200 mA	V_F	1.0	Volts
Junction Temperature Range	T_J	- 55 to + 150	°C
Storage Temperature Range	Ts	- 55 to + 150	°C

Note :

(1) T_L = Lead temperature at 5.0 mm^2 (0.013 mm thick) 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)
SZ252H	2.7	80	20	400	1.0	150	1.0	370
SZ253A	3.0	80	20	400	1.0	100	1.0	340
SZ253D	3.3	80	20	400	1.0	50	1.0	320
SZ253G	3.6	70	20	500	1.0	50	1.0	290
SZ253J	3.9	60	15	500	1.0	50	1.0	280
SZ254D	4.3	50	13	500	1.0	50	1.0	250
SZ254H	4.7	45	13	500	1.0	50	1.0	215
SZ255B	5.1	45	10	500	1.0	50	1.5	200
SZ255G	5.6	45	7.0	400	1.0	50	2.0	190
SZ256C	6.2	35	4.0	300	1.0	50	3.0	170
SZ256I	6.8	35	3.5	300	1.0	50	4.0	155
SZ257F	7.5	35	3.0	200	0.5	50	4.5	140
SZ258C	8.2	25	5.0	200	0.5	50	6.2	130
SZ259B	9.1	25	5.0	200	0.5	50	6.8	120
SZ2510	10	25	7.0	200	0.5	50	7.5	105
SZ2511	11	20	8.0	300	0.5	50	8.2	97
SZ2512	12	20	9.0	350	0.5	0.5	9.1	88
SZ2513	13	20	10	400	0.5	0.5	10	79
SZ2515	15	15	15	500	0.5	0.5	11	71
SZ2516	16	15	15	500	0.5	0.5	12	66
SZ2518	18	15	20	500	0.5	0.5	13	62
SZ2520	20	10	24	600	0.5	0.5	15	56
SZ2522	22	10	25	600	0.5	0.5	16	52
SZ2524	24	10	25	600	0.5	0.5	18	47
SZ2527	27	8.0	30	750	0.25	0.5	20	41
SZ2530	30	8.0	30	1000	0.25	0.5	22	36
SZ2533	33	8.0	35	1000	0.25	0.5	24	33
SZ2536	36	8.0	40	1000	0.25	0.5	27	30
SZ2539	39	6.0	50	1000	0.25	0.5	30	28
SZ2543	43	6.0	50	1000	0.25	0.5	33	26
SZ2547	47	4.0	90	1500	0.25	0.5	36	23
SZ2551	51	4.0	115	1500	0.25	0.5	39	21
SZ2556	56	4.0	120	2000	0.25	0.5	43	19
SZ2562	62	4.0	125	2000	0.25	0.5	47	16
SZ2568	68	4.0	130	2000	0.25	0.5	51	15
SZ2575	75	4.0	135	2000	0.25	0.5	56	14
SZ2582	82	2.7	200	3000	0.25	0.5	62	12
SZ2591	91	2.7	250	3000	0.25	0.5	68	10
SZ25B0	100	2.7	350	3000	0.25	0.5	75	9.4
SZ25B1	110	2.7	450	4000	0.25	0.5	82	8.6
SZ25B2	120	2.0	550	4500	0.25	0.5	91	7.8
SZ25B3	130	2.0	700	5000	0.25	0.5	100	7.0
SZ25B5	150	2.0	1000	6000	0.25	0.5	110	6.4
SZ25B6	160	1.5	1100	6500	0.25	0.5	120	5.8
SZ25B8	180	1.5	1200	7000	0.25	0.5	130	5.2
SZ25D0	200	1.5	1500	8000	0.25	0.5	150	4.7

Notes :

(1) The type number listed have a standard tolerance on the nominal zener voltage of ±5.0%.
(2) " SZ " will be omitted in marking on the diode.