



SILICON POWER ELECTRONICS

20 WATT ZENER DIODE

FEATURES

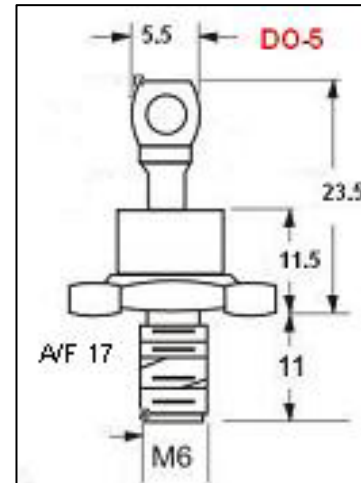
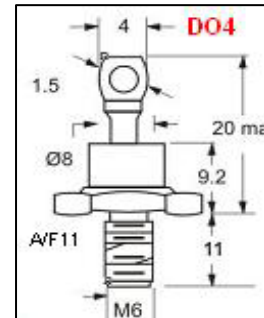
- Voltage range from 8.2V to 200V.
- Low Zener Impedance
- Available in normal polarity or reverse.
- DO4/DO5 Package

ABSOLUTE MAXIMUM RATING

Storage temperature range	: -65 °C to 150 °C
Max Case operating temperature	: -65 °C to 150 °C
Max junction temperature	: 150 °C
Power Dissipation	: 20 W
Power derating (derat above 75 °C)	: 0.5 mw/°C
Forward voltage (@ 2A)	: 1.5V

ELECTRICAL CHARACTERISTICS @ case temperature 30 °C

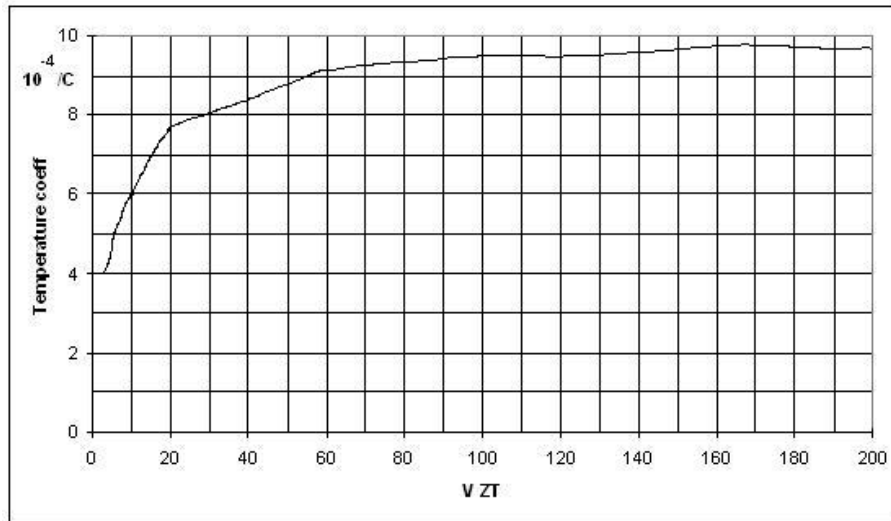
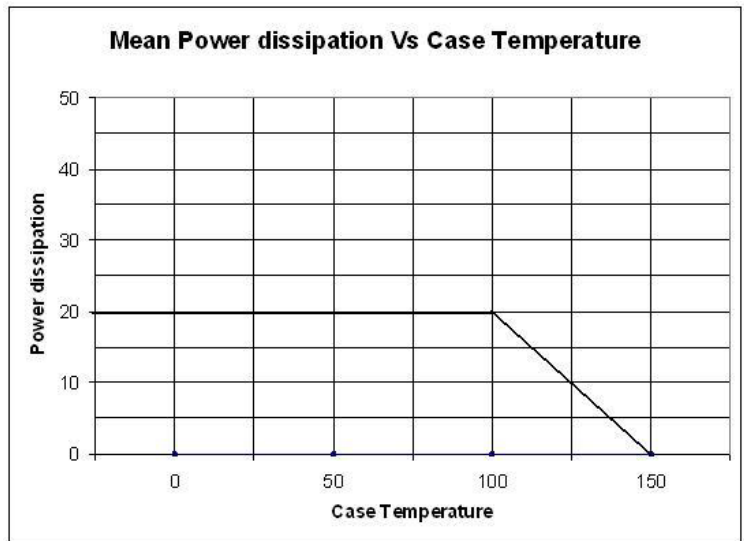
Nom VzT (V)	SPE Type	IzT (mA)	RzT max	IR (uA)	VR (V)	IzM (mA)
8.2	20Z8V2	580	1.7	25	6.12	2130
9.1	20Z9	550	1.8	25	6.82	2000
10	20Z10	500	2.3	25	7.50	1800
11	20Z11	460	2.8	10	8.25	1650
12	20Z12	420	3.2	10	9.00	1540
13	20Z13	375	3.9	10	9.75	1400
14	20Z14	350	4.4	10	10.50	1300
15	20Z15	330	5.7	10	11.25	1250
16	20Z16	310	6.1	10	12.00	1150
18	20Z18	280	6.9	10	13.50	1000
20	20Z20	255	7.8	10	15.00	900
22	20Z22	230	9.0	10	16.50	830
24	20Z24	210	9.8	10	18.00	750
27	20Z27	180	11	10	20.25	665
30	20Z30	165	11.9	10	22.50	600
33	20Z33	150	13	10	24.75	555
36	20Z36	135	14.6	10	27.00	500
39	20Z39	120	16	10	27.00	465
43	20Z43	110	16.9	10	29.25	420
47	20Z47	100	18	10	35.25	390
51	20Z51	96	20.8	10	38.25	360
56	20Z56	90	24	10	42.00	320
62	20Z62	82	28	10	46.50	300
68	20Z68	73	33	10	51.00	265
75	20Z75	67	44	10	56.25	240
82	20Z82	60	56	10	61.50	220
91	20Z91	55	67	10	68.25	200
100	20Z100	50	76	10	75.00	180
110	20Z110	46	102	10	82.50	165
120	20Z120	42	135	10	90.00	154
130	20Z130	39	150	10	97.50	140
140	20Z140	36	160	10	105.00	133
150	20Z150	33	170	10	112.50	125
160	20Z160	31	180	10	120.00	115
180	20Z180	28	195	10	135.00	100
200	20Z200	24	280	10	150.00	92



Note:

Normal polarity indicated anode to case.
 When using Jedec standards suffix R denotes reverse polarity (cathode to case).
 Suffix A and B denote tolerance of 10% and 5%.
 No suffix indicated tolerance of 20%.

V_{ZT} : Continuous reverse Voltage
 I_{ZT} : Regulating voltage test current
 I_R : Reverse current at specified V_R
 R_{ZT} : Differential resistance at I_{ZT}
 I_{ZM} : Max DC Zener current



Temperature coefficient VS Zener voltage

