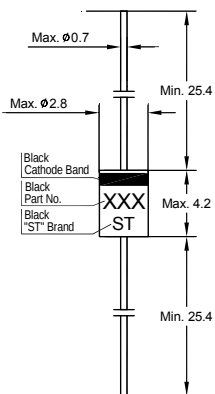


1N5913B...1N5939B

3 W Silicon Planar Power Zener Diodes



Glass Case DO-41
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Maximum Steady State Power Dissipation at $T_L = 75\text{ }^{\circ}\text{C}$, Lead Length = 3/8"	P_{tot}	3	W
Junction Temperature	T_j	175	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^{\circ}\text{C}$

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.5	V

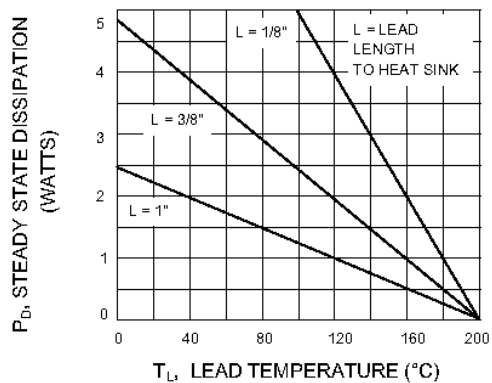
1N5913B...1N5939B

Characteristics $T_a = 25^\circ\text{C}$

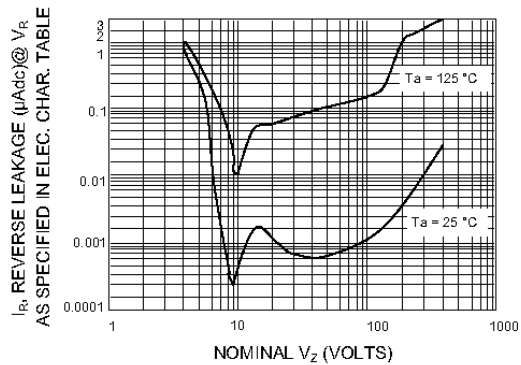
Type	Zener Voltage ¹⁾				Dynamic Resistance				Reverse Current		Maximum DC Zener Current
	V_{Znom}	V_{ZT}		at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R	
	(V)	Min. (V)	Max. (V)	(mA)	Max. (Ω)	(mA)	Max. (Ω)	(mA)	Max. (μA)	(V)	I_{ZM} (mA)
1N5913B	3.3	3.14	3.47	113.6	10	113.6	500	1	100	1	454
1N5914B	3.6	3.42	3.78	104.2	9	104.2	500	1	75	1	416
1N5915B	3.9	3.71	4.1	96.1	7.5	96.1	500	1	25	1	384
1N5916B	4.3	4.09	4.52	87.2	6	87.2	500	1	5	1	348
1N5917B	4.7	4.47	4.94	79.8	5	79.8	500	1	5	1.5	319
1N5918B	5.1	4.85	5.36	73.5	4	73.5	350	1	5	2	294
1N5919B	5.6	5.32	5.88	66.9	2	66.9	250	1	40	3	267
1N5920B	6.2	5.89	6.51	60.5	2	60.5	200	1	40	4	241
1N5921B	6.8	6.46	7.14	55.1	2.5	55.1	200	1	50	5.2	220
1N5922B	7.5	7.13	7.88	50	3	50	400	0.5	50	6	200
1N5923B	8.2	7.79	8.61	45.7	3.5	45.7	400	0.5	50	6.5	182
1N5924B	9.1	8.65	9.56	41.2	4	41.2	500	0.5	50	7	164
1N5925B	10	9.5	10.5	37.5	4.5	37.5	500	0.25	50	8	150
1N5926B	11	10.45	11.55	34.1	5.5	34.1	550	0.25	50	8.4	136
1N5927B	12	11.4	12.6	31.2	6.5	31.2	550	0.25	1	9.1	125
1N5928B	13	12.35	13.65	28.8	7	28.8	550	0.25	1	9.9	115
1N5929B	15	14.25	15.75	25	9	25	600	0.25	1	11.4	100
1N5930B	16	15.2	16.8	23.4	10	23.4	600	0.25	1	12.2	93
1N5931B	18	17.1	18.9	20.8	12	20.8	650	0.25	1	13.7	83
1N5932B	20	19	21	18.7	14	18.7	650	0.25	1	15.2	75
1N5933B	22	20.9	23.1	17	17.5	17	650	0.25	1	16.7	68
1N5934B	24	22.8	25.2	15.6	19	15.6	700	0.25	1	18.2	62
1N5935B	27	25.65	28.35	13.9	23	13.9	700	0.25	1	20.6	55
1N5936B	30	28.5	31.5	12.5	26	12.5	750	0.25	1	22.8	50
1N5937B	33	31.35	34.65	11.4	33	11.4	800	0.25	1	25.1	45
1N5938B	36	34.2	37.8	10.4	38	10.4	850	0.25	1	27.4	41
1N5939B	39	37.05	40.95	9.6	45	9.6	900	0.25	1	29.7	38

¹⁾ Tested with pulses $t_p = 20$ ms

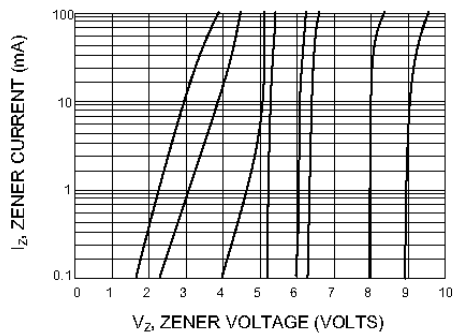
POWER TEMPERATURE DERATING CURVE



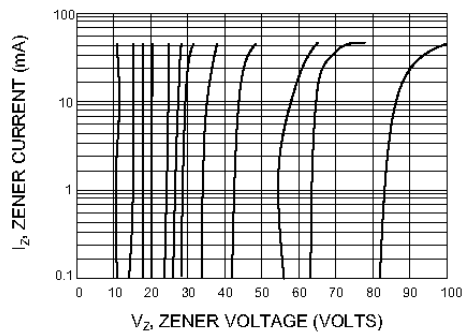
TYPICAL REVERSE LEAKAGE



ZENER VOLTAGE VS. ZENER CURRENT
 $V_Z = 3.3$ thru 10 VOLTS



ZENER VOLTAGE VS. ZENER CURRENT
 $V_Z = 12$ thru 82 VOLTS



ZENER VOLTAGE VS. ZENER CURRENT
 $V_Z = 100$ thru 400 VOLTS

