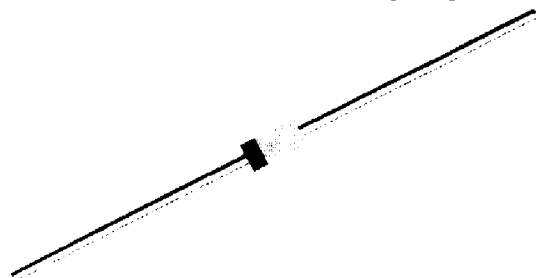


SILICON PLANAR ZENER DIODES

BZX85C 2V7 to 51V
DO-41 1.3W



These Zeners Are Best Suited For Industrial Purpose, Military & Space Applications. When Hermetically Sealed in Glass With Double Stud. This Passivated Chip Provides Excellent Stability & Reliability.

ABSOLUTE MAXIMUM RATINGS (Ta=25 deg C)

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation (1)	PTA	1.3	W
Surge Power Dissipation pulse Width =10ms	PS	10	W
Operating And Storage Junction Temperature Range	Tj,Tstg	-55 to+175	deg C
Maximum Lead Temperature for Soldering During 10 sec @ 4mm From Case	TL	230	deg C
Thermal Resistance Junction to Ambient (1)	Rth(j-a)	115.4	deg C/mW
Forward Voltage @ IF=200mA	VF	1.0	V

(1) On infinite heatsink with 4mm Lead Length

ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless otherwise Specified)

Device	VZT @IZT*	rZT @IZT*	IZT	rZK @IZK	IZK	Temp. Coeff of Zener Voltage typ	IR Ta= 25 deg C	@ 150degC	VR	IZM	IZSM##	
	min (V)	max (V)	max (ohm)		max (ohm)	(%/deg C)	max (uA)	max (uA)	(V)	(mA)	(mA)	
BZX85C 2V7	2.50	2.90	20	80	400	1.0	-0.07	150	300	1.0	370	2874
BZX85C 3V0	2.80	3.20	20	80	400	1.0	-0.07	100	300	1.0	340	2604
BZX85C 3V3	3.10	3.50	20	80	400	1.0	-0.06	40	200	1.0	320	2381
BZX85C 3V6	3.40	3.80	20	70	500	1.0	-0.06	20	50	1.0	290	2193
BZX85C 3V9	3.70	4.10	15	60	500	1.0	-0.05	10	20	1.0	280	2033
BZX85C 4V3	4.00	4.60	13	50	500	1.0	-0.03	3.0	10	1.0	250	1812
BZX85C 4V7	4.40	5.00	13	45	500	1.0	-0.01	3.0	10	1.0	215	1667
BZX85C 5V1	4.80	5.40	10	45	500	1.0	+0.01	1.0	10	1.5	200	1543
BZX85C 5V6	5.20	6.00	7	45	400	1.0	+0.03	1.0	10	2.0	190	1389
BZX85C 6V2	5.80	6.60	4	35	300	1.0	+0.04	1.0	10	3.0	170	1263
BZX85C 6V8	6.40	7.20	3.5	35	300	1.0	+0.05	1.0	10	4.0	155	1157
BZX85C 7V5	7.00	7.90	3	35	200	0.5	+0.05	1.0	10	4.5	140	1055
BZX85C 8V2	7.70	8.70	5	25	200	0.5	+0.06	1.0	10	6.2	130	958
BZX85C 9V1	8.50	9.60	5	25	200	0.5	+0.06	1.0	10	6.8	120	868
BZX85C 10	9.40	10.60	7.5	25	200	0.5	+0.07	0.5	10	7.0	105	786
BZX85C 11	10.40	11.60	8	20	300	0.5	+0.07	0.5	10	8.2	97	718
BZX85C 12	11.40	12.70	9	20	350	0.5	+0.07	0.5	10	9.1	88	656
BZX85C 13	12.40	14.10	10	20	400	0.5	+0.07	0.5	10	10	79	591
BZX85C 15	13.80	15.60	15	15	500	0.5	+0.08	0.5	10	11	71	534
BZX85C 16	15.30	17.10	15	15	500	0.5	+0.08	0.5	10	12	66	487
BZX85C 18	16.80	19.10	20	15	500	0.5	+0.08	0.5	10	13	62	436
BZX85C 20	18.80	21.20	24	10	600	0.5	+0.08	0.5	10	15	56	393
BZX85C 22	20.80	23.30	25	10	600	0.5	+0.08	0.5	10	16	52	358
BZX85C 24	22.80	25.60	25	10	600	0.5	+0.08	0.5	10	18	47	326

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.



ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless otherwise Specified)

Device	VZT @IZT*	rZT @IZT*	IZT	rZK @IZK	IZK	Temp. Coeff of Zener Voltage typ (%/deg C)	IR Ta= 25 deg C max (uA)	@ 150degC max (uA)	VR (V)	IZM (mA)	IZSM## (mA)
	min (V)	max (V)	max (ohm)	max (ohm)	max (mA)						
BZX85C 27	25.10	28.90	30	750	0.25	+0.09	0.5	10	20	41	288
BZX85C 30	28.00	32.00	30	1000	0.25	+0.09	0.5	10	22	36	260
BZX85C 33	31.00	35.00	35	1000	0.25	+0.09	0.5	10	24	33	238
BZX85C 36	34.00	38.00	40	1000	0.25	+0.09	0.5	10	27	30	219
BZX85C 39	37.00	41.00	50	1000	0.25	+0.09	0.5	10	30	28	203
BZX85C 43	40.00	46.00	50	1000	0.25	+0.09	0.5	10	33	26	181
BZX85C 47	44.00	50.00	90	1500	0.25	+0.09	0.5	10	36	23	167
BZX85C 51	48.00	54.00	115	1500	0.25	+0.09	0.5	10	39	21	154

*Pulse Condition : 20ms ≤ tp ≤ 50ms, Duty Cycle = 2%

Rectangular wave form (tp=10ms)

DO-41 Glass Axial Package
