

Zener diode

Features

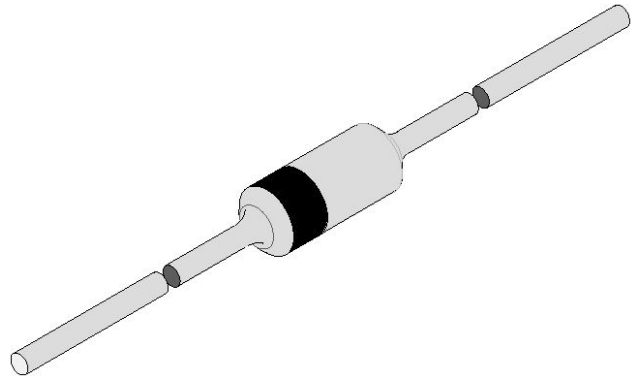
High reliability

Applications

Voltage stabilization

Construction

Silicon epitaxial planar



Absolute Maximum Ratings

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	$I=4\text{mm } T_L \leq 25^{\circ}\text{C}$		P_V	500	mW
Z-current			I_Z	P_V/V_Z	mA
Junction temperature			T_j	175	$^{\circ}\text{C}$
Storage temperature range			T_{stg}	-65~+175	$^{\circ}\text{C}$

Maximum Thermal Resistance

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$I=4\text{mm } T_L=\text{constant}$	R_{thJA}	350	K/W

Electrical Characteristics

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=10\text{mA}$		V_F			0.9	V

BZX79C Series

Type	V _{Znom}	I _{ZT}	for V _{ZT} and	r _{zT}	r _{zIK} at I _{ZK}	I _R and I _R at V _R	TK _{VZ}
BZX79C	V	mA	V ¹⁾	Ω	Ω	μA	%/K
2V4	2.4	5	2.2~2.6	<100	<600	1	-0.09~-0.06
2V7	2.7	5	2.5~2.9	<100	<600	1	-0.09~-0.06
3V0	3.0	5	2.8~3.2	<95	<600	1	-0.08~-0.05
3V3	3.3	5	3.1~3.5	<95	<600	1	-0.08~-0.05
3V6	3.6	5	3.4~3.8	<90	<600	1	-0.08~-0.05
3V9	3.9	5	3.7~4.1	<90	<600	1	-0.08~-0.05
4V3	4.3	5	4.0~4.6	<90	<600	1	-0.06~-0.03
4V7	4.7	5	4.4~5.0	<80	<500	1	-0.05~+0.02
5V1	5.1	5	4.8~5.4	<60	<480	1	-0.02~+0.02
5V6	5.6	5	5.2~6.0	<40	<400	1	-0.05~+0.05
6V2	6.2	5	5.8~6.6	<10	<150	1	0.03~0.06
6V8	6.8	5	6.4~7.2	<15	<80	1	0.03~0.07
7V5	7.5	5	7.0~7.9	<15	<80	1	0.03~0.07
8V2	8.2	5	7.7~8.7	<15	<80	1	0.03~0.08
9V1	9.1	5	8.5~9.6	<20	<100	1	0.03~0.09
10	10	5	9.4~10.6	<20	<150	1	0.03~0.1
11	11	5	10.4~11.6	<20	<150	1	0.03~0.11
12	12	5	11.4~12.7	<25	<150	1	0.03~0.11
13	13	5	12.4~14.1	<30	<170	1	0.03~0.11
15	15	5	13.8~15.6	<30	<200	1	0.03~0.11
16	16	5	15.3~17.1	<40	<200	1	0.03~0.11
18	18	5	16.8~19.1	<45	<225	1	0.03~0.11
20	20	5	18.8~21.2	<55	<225	1	0.03~0.11
22	22	5	20.8~23.3	<55	<250	1	0.04~0.12
24	24	5	22.8~25.6	<70	<250	1	0.04~0.12
27	27	2	25.1~28.9	<80	<300 ²⁾	1	0.04~0.12
30	30	2	28~32	<80	<300 ²⁾	1	0.04~0.12
33	33	2	31~35	<80	<325 ²⁾	1	0.04~0.12
36	36	2	34~38	<90	<350 ²⁾	1	0.04~0.12
39	39	2	37~41	<130	<350 ²⁾	0.5	0.04~0.12
43	43	2	40~46	<150	<375 ²⁾	0.5	0.04~0.12
47	47	2	44~50	<170	<375 ²⁾	0.5	0.04~0.12
51	51	2	48~54	<180	<400 ²⁾	0.5	0.04~0.12
56	56	2	52~60	<200	<425 ²⁾	0.5	0.04~0.12
62	62	2	58~66	<215	<450 ²⁾	0.5	0.04~0.12
68	68	2	64~72	<240	<475 ²⁾	0.5	0.04~0.12
75	75	2	70~79	<255	<500 ²⁾	0.5	0.04~0.12

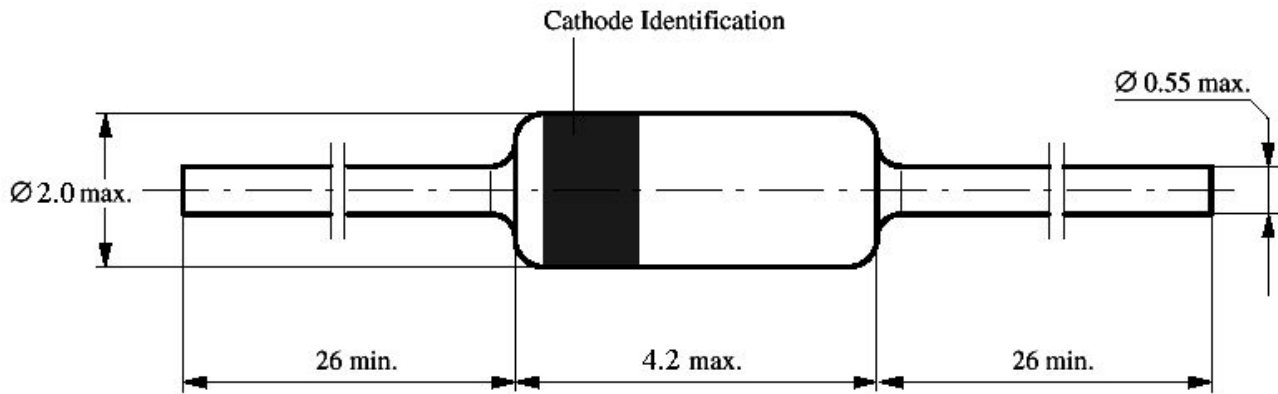
¹⁾ Tighter tolerances available request:

BZX79B... ±2% of V_{Znom}

BZX79F... ±3% of V_{Znom}

²⁾ at I_Z=2.0mA

Dimensions in mm



Standard Glass Case
JEDEC DO 35