



Zener diode

Features

1. High reliability
2. Low reverse current
3. Very sharp reverse characteristic



Applications

Voltage stabilization

Absolute Maximum Ratings

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

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	$I=4\text{mm}$ $T_L \leqslant 25\text{ }^\circ\text{C}$		P_V	1.3	W
Junction temperature			T_j	175	$^\circ\text{C}$
Storage temperature range			T_{stg}	-65--+175	$^\circ\text{C}$

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

Electrical Characteristics

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

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=200\text{mA}$		V_F			1	V

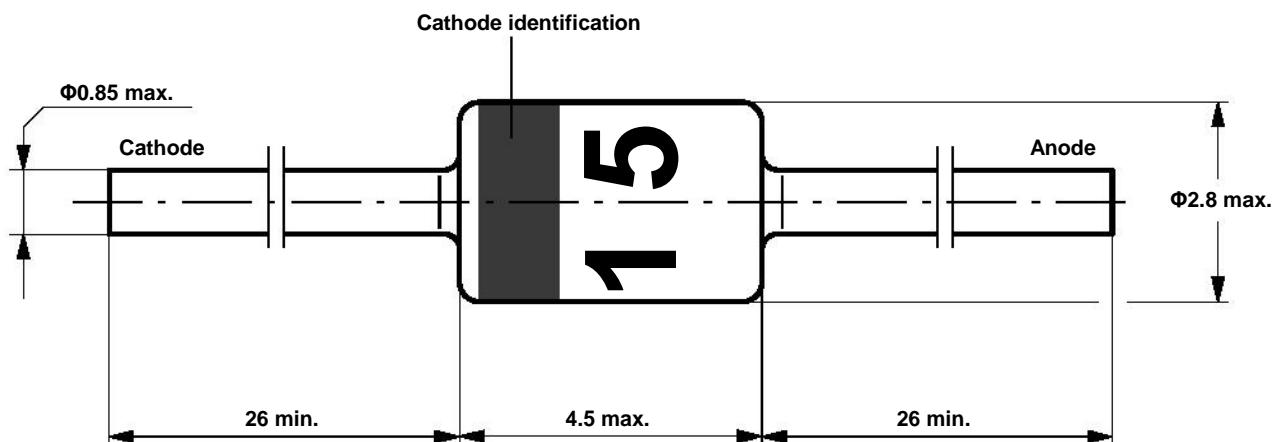
Excel Semiconductor



Type	V _{Znom}	I _{ZT}	for V _{ZT} and	r _{zT}	r _{zK} at	I _{ZK}	I _R at	V _R	T _{KVZ}
BZX85C	V	mA	V	Ω	Ω	mA	μA	V	%/K
2V7	2.7	80	2.5~2.9	<20	<400	1	<150	1	-0.09~-0.06
3V0	3.0	80	2.8~3.2	<20	<400	1	<100	1	-0.08~-0.05
3V3	3.3	80	3.1~3.5	<20	<400	1	<40	1	-0.08~-0.05
3V6	3.6	60	3.4~3.8	<20	<500	1	<20	1	-0.08~-0.05
3V9	3.9	60	3.7~4.1	<15	<500	1	<10	1	-0.08~-0.05
4V3	4.3	50	4.0~4.6	<13	<500	1	<3	1	-0.06~-0.03
4V7	4.7	45	4.4~5.0	<13	<500	1	<3	1	-0.05~+0.02
5V1	5.1	45	4.8~5.4	<10	<500	1	<1	1	-0.02~+0.02
5V6	5.6	45	5.2~6.0	<7	<400	1	<1	1	-0.05~+0.05
6V2	6.2	35	5.8~6.6	<4	<300	1	<1	2	0.03~0.06
6V8	6.8	35	6.4~7.2	<3.5	<300	1	<1	3	0.03~0.07
7V5	7.5	35	7.0~7.9	<3	<200	0.5	<1	5	0.03~0.07
8V2	8.2	25	7.7~8.7	<5	<200	0.5	<1	6.2	0.03~0.08
9V1	9.1	25	8.5~9.6	<5	<200	0.5	<1	6.8	0.03~0.09
10	10	25	9.4~10.6	<7	<200	0.5	<0.5	7.5	0.03~0.1
11	11	20	10.4~11.6	<8	<300	0.5	<0.5	8.2	0.03~0.11
12	12	20	11.4~12.7	<9	<350	0.5	<0.5	9.1	0.03~0.11
13	13	20	12.4~14.1	<10	<400	0.5	<0.5	10	0.03~0.11
15	15	15	13.8~15.6	<15	<500	0.5	<0.5	11	0.03~0.11
16	16	15	15.3~17.1	<15	<500	0.5	<0.5	12	0.03~0.11
18	18	15	16.8~19.1	<20	<500	0.5	<0.5	13	0.03~0.11
20	20	10	18.8~21.2	<24	<600	0.5	<0.5	15	0.03~0.11
22	22	10	20.8~23.3	<25	<600	0.5	<0.5	16	0.04~0.12
24	24	10	22.8~25.6	<25	<600	0.5	<0.5	18	0.04~0.12
27	27	8	25.1~28.9	<30	<750	0.25	<0.5	20	0.04~0.12
30	30	8	28~32	<30	<1000	0.25	<0.5	22	0.04~0.12
33	33	8	31~35	<35	<1000	0.25	<0.5	24	0.04~0.12
36	36	8	34~38	<40	<1000	0.25	<0.5	27	0.04~0.12
39	39	6	37~41	<50	<1000	0.25	<0.5	30	0.04~0.12
43	43	6	40~46	<50	<1000	0.25	<0.5	33	0.04~0.12
47	47	4	44~50	<90	<1500	0.25	<0.5	36	0.04~0.12
51	51	4	48~54	<115	<1500	0.25	<0.5	39	0.04~0.12
56	56	4	52~60	<120	<2000	0.25	<0.5	43	0.04~0.12
62	62	4	58~66	<125	<2000	0.25	<0.5	47	0.04~0.12
68	68	4	64~72	<130	<2000	0.25	<0.5	51	0.04~0.12
75	75	4	70~79	<135	<2000	0.25	<0.5	56	0.04~0.12

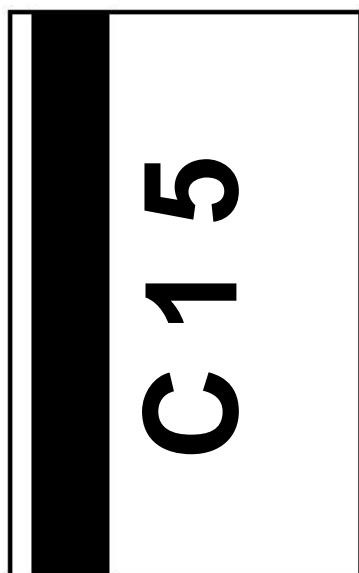


Dimensions in mm



Standard Glass Case
JEDEC DO-41

Marking



Excel Semiconductor