Small Signal Product

Hermatically Sealed Glass Zener

FEATURES

- Wide zener voltage range selection: 2.0V to 75V
- Compression bonded construction
- Hermetically sealed glasss
- Solder hot dip Tin(Sn) lead finish
- Pb free and RoHS compliant
- All external surfaces are corrosion resistant and leads are readily solderable
- Packing code with suffix "G" means Halogen-free

DO-35

Hermetically Sealed Glass

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

- Case: DO-35
- High temperature soldering guaranteed: 260°C/10s
- Polarity: Indicated by black cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)			
PARAMETER	SYMBO	VALUE	UNIT
Power Dissipation	P_D	500	mW
Forward Voltage I_F = 100 mA	V_F	1	V
Junction and Storage Temperature Range	T_J, T_{STG}	- 65 to +200	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

ELECTRICAL CHARACTERISTICS (T_A= 25°C unless otherwise noted)

Device Type	V_Z @ I_{ZT} (V)		I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω) Max	I_{ZK} (mA)	Z_{ZK} @ I_{ZK} (Ω) Max	I_R @ V_R(μA) Max	V_R (V)
	Min	Max						
BZX55C2V0	1.88	2.11	5.0	100	1.0	600	100	1.0
BZX55C2V2	2.08	2.33	5.0	100	1.0	600	100	1.0
BZX55C2V4	2.28	2.56	5.0	85	1.0	600	50	1.0
BZX55C2V7	2.51	2.89	5.0	85	1.0	600	10	1.0
BZX55C3V0	2.8	3.2	5.0	85	1.0	600	4.0	1.0
BZX55C3V3	3.1	3.5	5.0	85	1.0	600	2.0	1.0
BZX55C3V6	3.4	3.8	5.0	85	1.0	600	2.0	1.0
BZX55C3V9	3.7	4.1	5.0	85	1.0	600	2.0	1.0
BZX55C4V3	4.0	4.6	5.0	75	1.0	600	1.0	1.0
BZX55C4V7	4.4	5.0	5.0	60	1.0	600	0.5	1.0
BZX55C5V1	4.8	5.4	5.0	35	1.0	550	0.1	1.0
BZX55C5V6	5.2	6.0	5.0	25	1.0	450	0.1	1.0
BZX55C6V2	5.8	6.6	5.0	10	1.0	200	0.1	2.0
BZX55C6V8	6.4	7.2	5.0	8	1.0	150	0.1	3.0
BZX55C7V5	7.0	7.9	5.0	7	1.0	50	0.1	5.0
BZX55C8V2	7.7	8.7	5.0	7	1.0	50	0.1	6.2
BZX55C9V1	8.5	9.6	5.0	10	1.0	50	0.1	6.8
BZX55C10	9.4	10.6	5.0	15	1.0	70	0.1	7.5
BZX55C11	10.4	11.6	5.0	20	1.0	70	0.1	8.2
BZX55C12	11.4	12.7	5.0	20	1.0	90	0.1	9.1
BZX55C13	12.4	14.1	5.0	26	1.0	110	0.1	10
BZX55C15	13.8	15.6	5.0	30	1.0	110	0.1	11
BZX55C16	15.3	17.1	5.0	40	1.0	170	0.1	12
BZX55C18	16.8	19.1	5.0	50	1.0	170	0.1	14
BZX55C20	18.8	21.2	5.0	55	1.0	220	0.1	15
BZX55C22	20.8	23.3	5.0	55	1.0	220	0.1	17
BZX55C24	22.8	25.6	5.0	80	1.0	220	0.1	18
BZX55C27	25.1	28.9	5.0	80	1.0	220	0.1	20
BZX55C30	28	32	5.0	80	1.0	220	0.1	22
BZX55C33	31	35	5.0	80	1.0	220	0.1	24
BZX55C36	34	38	5.0	80	1.0	220	0.1	27
BZX55C39	37	41	2.5	90	0.5	500	0.1	28
BZX55C43	40	46	2.5	90	0.5	600	0.1	32
BZX55C47	44	50	2.5	110	0.5	700	0.1	35
BZX55C51	48	54	2.5	125	0.5	700	0.1	38
BZX55C56	52	60	2.5	135	0.5	1000	0.1	42
BZX55C62	58	66	2.5	150	0.5	1000	0.1	47
BZX55C68	64	72	2.5	160	0.5	1000	0.1	51
BZX55C75	70	80	2.5	170	0.5	1000	0.1	56

Notes：1. Tolerance and voltage designation : the type numbers listed have zener voltage as shown.

2. Specials available include : nomial zener voltages between the voltages shown and tighter voltage, for detailed information on price, availability and delivery, contact your nearest Taiwan Semiconductor representative.
3. Zener voltage (V_Z) measurement : the zener voltage is measured under pulse conditions such that T_J is more than 2°C above T_A.
4. Zener impedance (Z_Z) derivation : zener impedance is derived from the 60-cycle ac voltage, which results when ac current having an RMS value equal to 10% of the dc zener current(I_{ZT}) is superimposed to I_{ZT} .

Small Signal Product

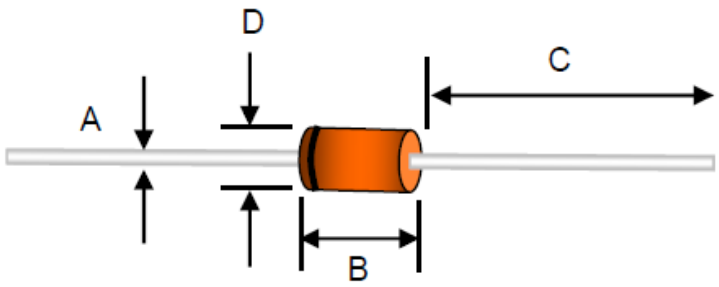
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 2)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
BZX55Cxxx (Note1)	-xx	R0	G	DO-35	10K / 14" Reel
		A0			5K / Box (Ammo)

Note 1: "xxx" defines voltage from 2.0V (BZX55C2V0) to 75V (BZX55C75)

Note 2: Part No. Suffix „-xx “ would be used for special requirement

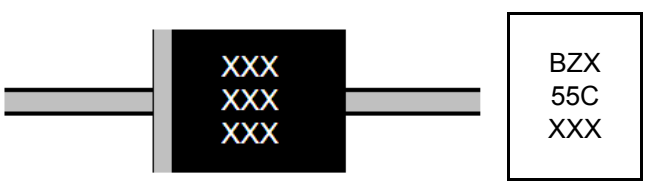
EXAMPLE					
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
BZX55C75 R0G	BZX55C75		R0	G	Multiple manufacture source Halogen free
BZX55C75-L0 R0G	BZX55C75	L0	R0	G	Multiple manufacture source Halogen free
BZX55C75-B0 R0G	BZX55C75	B0	R0	G	Define manufacture source Halogen free

PACKAGE OUTLINE DIMENSION



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.34	0.60	0.013	0.024
B	2.90	5.08	0.114	0.200
C	25.40	38.10	1.000	1.500
D	1.30	2.28	0.051	0.090

MARKING DIAGRAM



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Document Number: DS_S1410001 Version: C14