LITE-ON SEMICONDUCTORS

BZV55C2V0 THRU BZV55C75

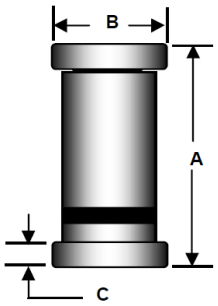
LL-34 Hermetically Sealed Glass Zener Voltage Regulators

REVERSE VOLTAGE – 2.0 to 75 Volts
POWER DISSIPATION – 0.5 Watts

FEATURES

- Zener Voltage Range 2.0 to 75 Volts
- LL-34 (Mini-MELF) Package
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
- RoHS Compliant
- Matte Tin (Sn) Lead Finish
- Color band Indicates Negative Polarity

LL-34



LL-34		
DIM.	MIN.	MAX.
A	3.30	3.60
B	1.40	1.50
C	0.35	0.5
All Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation	P_D	500	mW
Storage Temperature Range	T_{STG}	-65 to +175	°C
Operating Junction Temperature	T_{OPR}	+175	°C

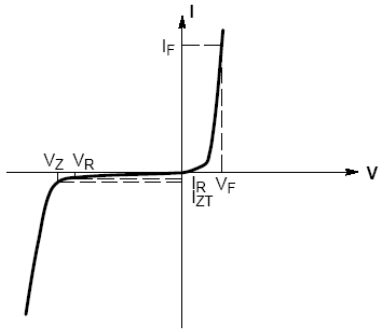
Device Marking :

Device P/N	Marking	Pin Diagram	Equivalent Circuit Diagram
BZV55Cxxx	N/A		

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

Electrical Characteristics @ T_A = 25℃ unless otherwise specified

Symbol	Parameter
V_Z	Reverse Zener Voltage @ IZT
I_{ZT}	Reverse Current
Z_{ZT}	Maximum Zener Impedance @ IZT
I_{ZK}	Reverse Current
Z_{ZK}	Maximum Zener Impedance @ IZK
I_R	Reverse Leakage Current @ VR
V_R	Reverse Voltage
I_F	Forward Current
V_F	Forward Voltage @ IF



Electrical Characteristics

T_A = 25°C unless otherwise noted

Device Type	V_Z @ I_{ZT} (Volts)		I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω) Max	I_{ZK} (mA)	Z_{ZK} @ I_{ZK} (Ω) Max	I_R @ V_R (uA) Max	V_R (Volts)
	Min	Max						
BZV55C 2V0	1.88	2.11	5	100	1	600	50	1
BZV55C 2V2	2.08	2.33	5	100	1	600	50	1
BZV55C 2V4	2.28	2.56	5	85	1	600	50	1
BZV55C 2V7	2.51	2.89	5	85	1	600	10	1
BZV55C 3V0	2.8	3.2	5	85	1	600	4	1
BZV55C 3V3	3.1	3.5	5	85	1	600	2	1
BZV55C 3V6	3.4	3.8	5	85	1	600	2	1
BZV55C 3V9	3.7	4.1	5	85	1	600	2	1
BZV55C 4V3	4	4.6	5	75	1	600	1	1
BZV55C 4V7	4.4	5	5	60	1	600	0.5	1
BZV55C 5V1	4.8	5.4	5	35	1	550	0.1	1
BZV55C 5V6	5.2	6	5	25	1	450	0.1	1
BZV55C 6V2	5.8	6.6	5	10	1	200	0.1	2
BZV55C 6V8	6.4	7.2	5	8	1	150	0.1	3
BZV55C 7V5	7	7.9	5	7	1	50	0.1	5
BZV55C 8V2	7.7	8.7	5	7	1	50	0.1	6.2
BZV55C 9V1	8.5	9.6	5	10	1	50	0.1	6.8
BZV55C 10	9.4	10.6	5	15	1	70	0.1	7.5
BZV55C 11	10.4	11.6	5	20	1	70	0.1	8.2
BZV55C 12	11.4	12.7	5	20	1	90	0.1	9.1
BZV55C 15	13.8	15.6	5	30	1	110	0.1	11
BZV55C 16	15.3	17.1	5	40	1	170	0.1	12
BZV55C 18	16.8	19.1	5	50	1	170	0.1	13
BZV55C 20	18.8	21.1	5	55	1	220	0.1	15
BZV55C 22	20.8	23.3	5	55	1	220	0.1	16
BZV55C 24	22.8	25.6	5	80	1	220	0.1	18
BZV55C 27	25.1	28.9	5	80	1	220	0.1	20
BZV55C 30	28	32	5	80	1	220	0.1	22
BZV55C 33	31	35	5	80	1	220	0.1	24
BZV55C 36	34	38	5	80	1	220	0.1	27
BZV55C 39	37	41	2.5	90	0.5	500	0.1	28
BZV55C 43	40	46	2.5	90	0.5	600	0.1	32
BZV55C 47	44	50	2.5	110	0.5	700	0.1	35
BZV55C 51	48	54	2.5	125	0.5	700	0.1	38
BZV55C 56	52	60	2.5	135	0.5	1000	0.1	42
BZV55C 62	58	66	2.5	150	0.5	1000	0.1	47
BZV55C 68	64	72	2.5	160	0.5	1000	0.1	51
BZV55C 75	70	80	2.5	170	0.5	1000	0.1	56

V_F Forward Voltage = 1.0 V Maximum @ I_F = 100 mA for all types

Notes:

1. The type numbers listed have zener voltage min/max limits as shown.
2. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest Liteon Semiconductor Corp. representative.
3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK}.

BZV55C2V0 THRU BZV55C75

Typical Characteristics

Figure 1. Power Dissipation vs Ambient Temperature

Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature

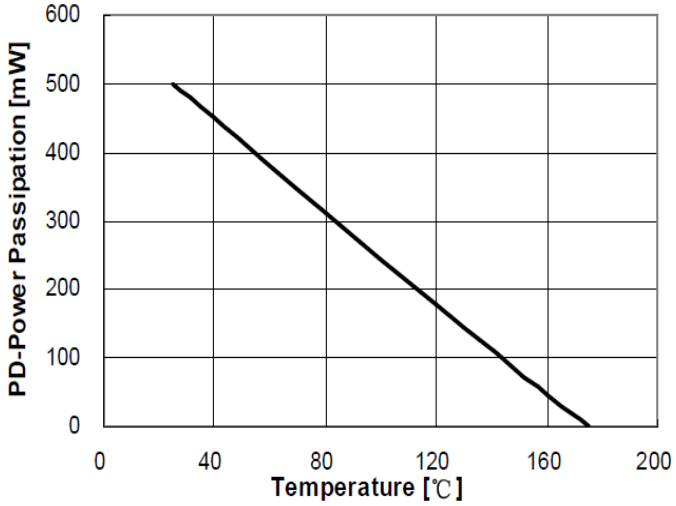


Figure 2. Total Capacitance

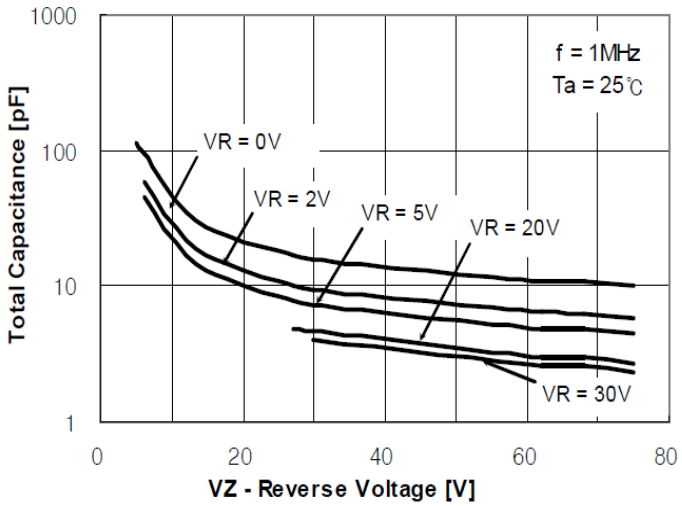


Figure 3. Differential Impedance vs. Zener Voltage

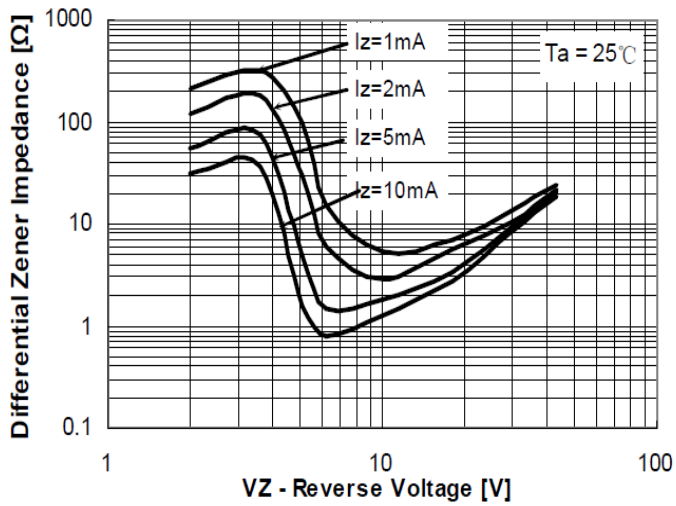


Figure 4. Forward Current vs. Forward Voltage

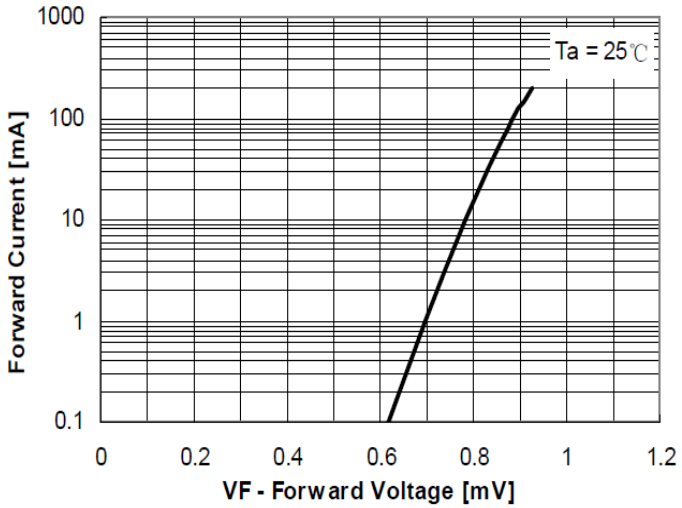


Figure 5. Reverse Current vs. Reverse Voltage

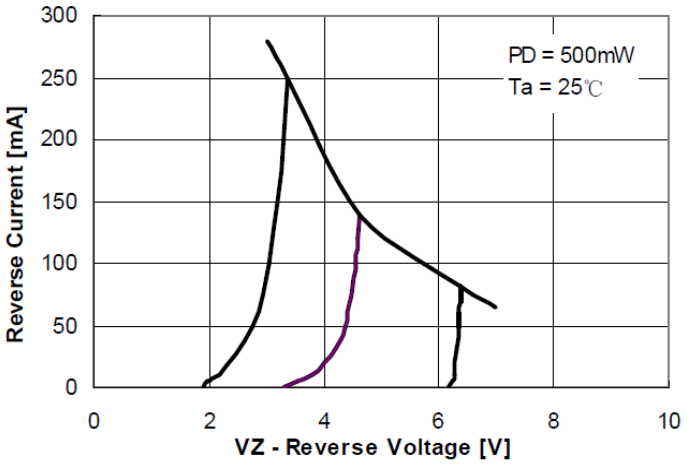
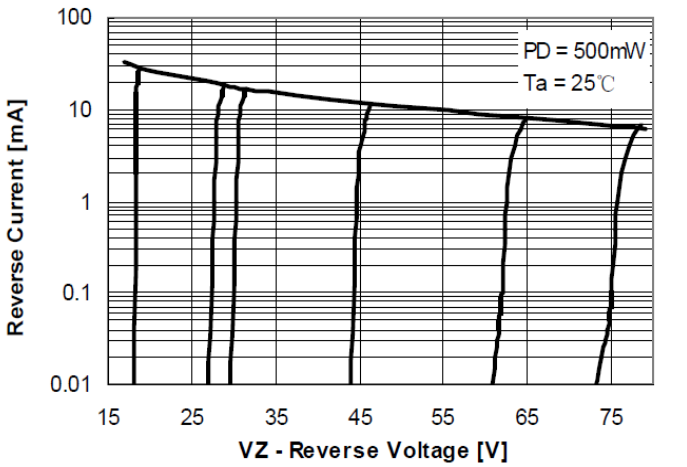


Figure 6. Reverse Current vs. Reverse Voltage



Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.