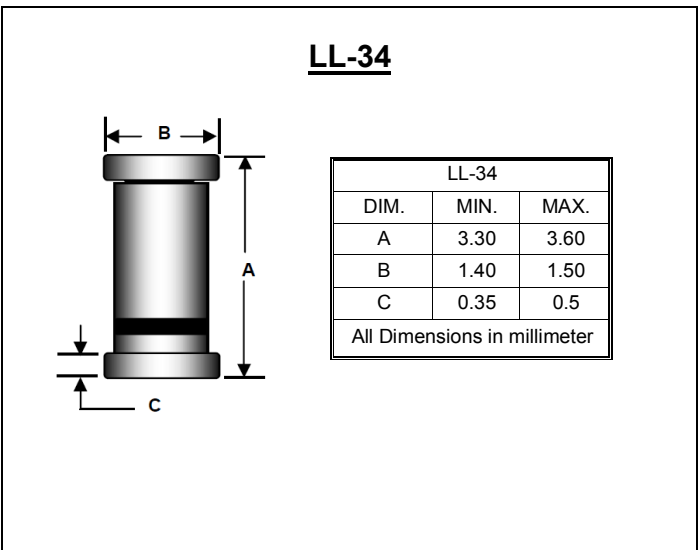


LL-34 Hermetically Sealed Glass Zener Voltage Regulators

**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



Maximum Ratings & Thermal Characteristics @ T_A = 25°C 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

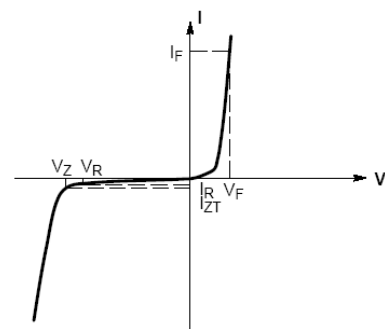
Device Marking :

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°C unless otherwise specified

Symbol	Parameter
V _Z	Reverse Zener Voltage @ I _{ZT}
I _{ZT}	Reverse Current
Z _{ZT}	Maximum Zener Impedance @ I _{ZT}
I _{ZK}	Reverse Current
Z _{ZK}	Maximum Zener Impedance @ I _{ZK}
I _R	Reverse Leakage Current @ V _R
V _R	Reverse Voltage
I _F	Forward Current
V _F	Forward Voltage @ I _F



Electrical Characteristics

TA = 25°C unless otherwise noted

Device Type	VZ @ IZT (Volts)		IZT (mA)	Zzt @ IZT (Ω) Max	IZK (mA)	Zzk @ Izk (Ω) Max	IR @ VR (μA) Max	VR (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

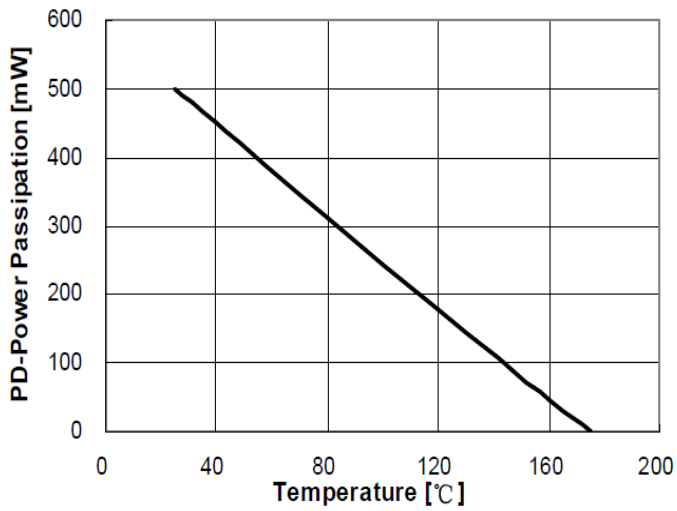


Figure 2. Total Capacitance

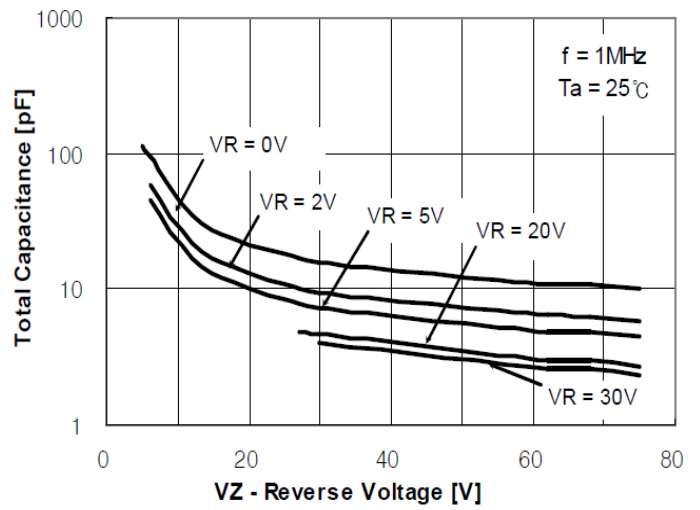


Figure 3. Differential Impedance vs. Zener Voltage

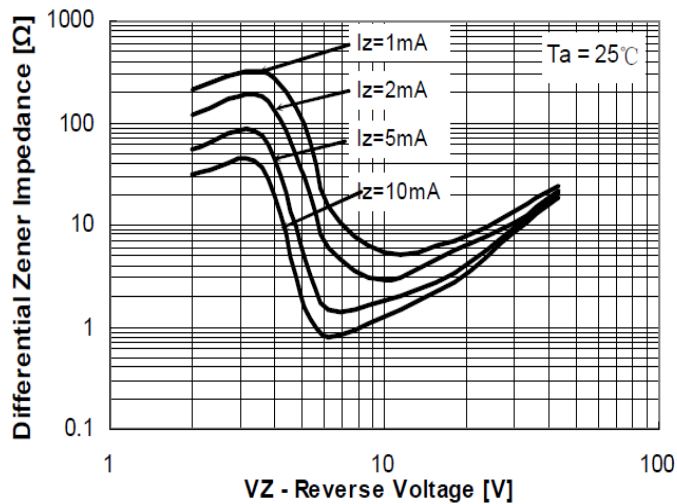


Figure 4. Forward Current vs. Forward Voltage

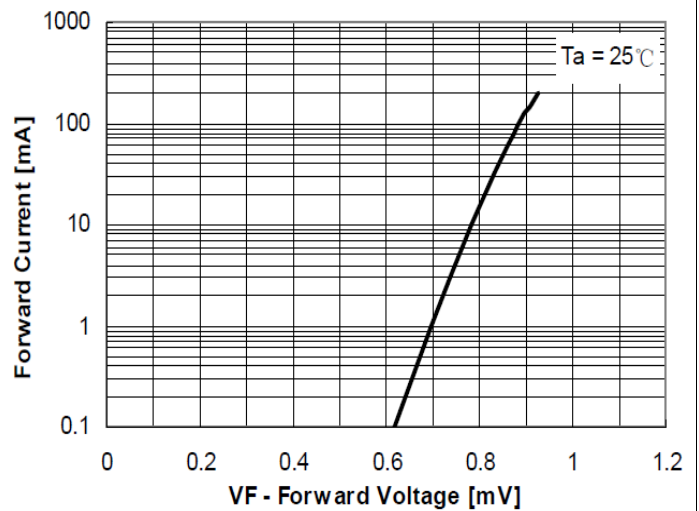


Figure 5. Reverse Current vs. Reverse Voltage

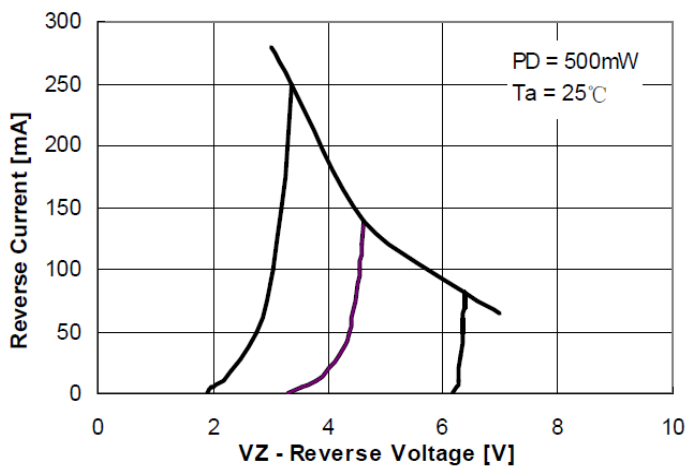
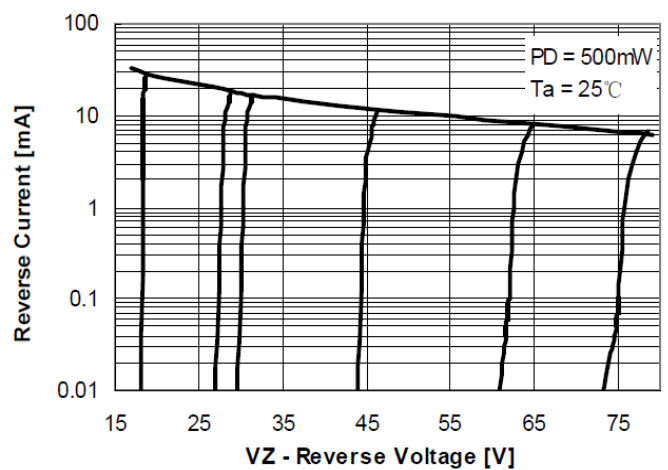


Figure 6. Reverse Current vs. Reverse Voltage



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