SEMICONDUCTOR

DATA SHEET

LLZ52xxB Series

500 mW LL-34 Hermetically Sealed Glass Zener Voltage Regulators

SURFACE MOUNT
LL34

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Parameter	Value	Units
Power Dissipation	500	mW
Storage Temperature Range	-65 to +200	°C
Operating Junction Temperature	+200	°C

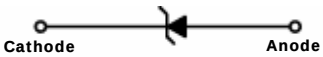
These ratings are limiting values above which the serviceability of the diode may be impaired.

DEVICE MARKING DIAGRAM

Cathode Band Color	Tolerance
Brown	10%
Blue	5%
Orange	2%
Yellow	1%

Specification Features:

- Zener Voltage Range 2.4 to 56 Volts
- LL-34 (Mini-MELF) Package
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All external surfaces are corrosion resistant and leads are readily solderable
- 1st band indicates negative polarity



ELECTRICAL SYMBOL

Electrical Characteristics T_A = 25°C unless otherwise noted

Device Type	V_Z @ I_{ZT} (Volts) Nominal	I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω) Max	Z_{ZK} @ I_{ZK} = 0.25mA (Ω) Max	I_R @ V_R (μA) Max	V_R (Volts)
LLZ5221B	2.4	20	30	1200	100	1
LLZ5222B	2.5	20	30	1250	100	1
LLZ5223B	2.7	20	30	1300	75	1
LLZ5224B	2.8	20	30	1400	75	1
LLZ5225B	3	20	29	1600	50	1
LLZ5226B	3.3	20	28	1600	25	1
LLZ5227B	3.6	20	24	1700	15	1
LLZ5228B	3.9	20	23	1900	10	1
LLZ5229B	4.3	20	22	2000	5	1
LLZ5230B	4.7	20	19	1900	5	2
LLZ5231B	5.1	20	17	1600	5	2
LLZ5232B	5.6	20	11	1600	5	3
LLZ5233B	6	20	7	1600	5	3.5
LLZ5234B	6.2	20	7	1000	5	4
LLZ5235B	6.8	20	5	750	3	5
LLZ5236B	7.5	20	6	500	3	6
LLZ5237B	8.2	20	8	500	3	6.5
LLZ5238B	8.7	20	8	600	3	6.5
LLZ5239B	9.1	20	10	600	3	7
LLZ5240B	10	20	17	600	3	8
LLZ5241B	11	20	22	600	2	8.4
LLZ5242B	12	20	30	600	1	9.1
LLZ5243B	13	9.5	13	600	0.5	9.9

Electrical Characteristics

T_A = 25°C unless otherwise noted

Device Type	V_Z @ I_{ZT} (Volts) Nominal	I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω) Max	Z_{ZK} @ I_{ZK} = 0.25mA (Ω) Max	I_R @ V_R (μA) Max	V_R (Volts)
LLZ5244B	14	9	15	600	0.1	10
LLZ5245B	15	8.5	16	600	0.1	11
LLZ5246B	16	7.8	17	600	0.1	12
LLZ5247B	17	7.4	19	600	0.1	13
LLZ5248B	18	7	21	600	0.1	14
LLZ5249B	19	6.6	23	600	0.1	14
LLZ5250B	20	6.2	25	600	0.1	15
LLZ5251B	22	5.6	29	600	0.1	17
LLZ5252B	24	5.2	33	600	0.1	18
LLZ5253B	25	5	35	600	0.1	19
LLZ5254B	27	4.6	41	600	0.1	21
LLZ5255B	28	4.5	44	600	0.1	21
LLZ5256B	30	4.2	49	600	0.1	23
LLZ5257B	33	3.8	58	700	0.1	25
LLZ5258B	36	3.4	70	700	0.1	27
LLZ5259B	39	3.2	80	800	0.1	30
LLZ5258B	36	3.4	70	700	0.1	27
LLZ5259B	39	3.2	80	800	0.1	30
LLZ5260B	43	3	93	900	0.1	33
LLZ5261B	47	2.7	105	1000	0.1	36
LLZ5262B	51	2.5	125	1100	0.1	39
LLZ5263B	56	2.2	150	1300	0.1	43

V_F Forward Voltage = 1.1 V Maximum @ I_F = 200 mA for all types

Notes:

1. The type numbers listed have zener voltage as shown and have a standard tolerance on the nominal zener voltage of ±5% in Blue marking, suffix A=±10% in Brown marking, C= ±2% in Orange marking and D = ±1% in Yellow marking.
2. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter
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}.

Electrical Symbol Definition

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	Breakdown Voltage
I_F	Forward Current
V_F	Forward Voltage @ I_F

Typical Characteristics