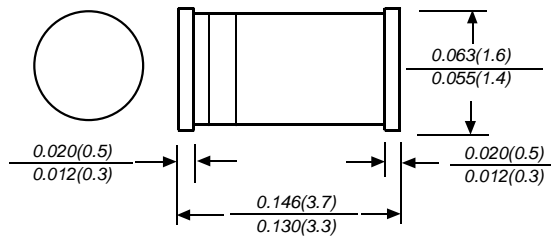


Data Sheet 2596, Rev. -

DL52/ZMM52-SERIES
ZENER DIODES

Zener Voltage:2.4-56V Peak Pulse Power:500mW

MINI MELF



FEATURE

- ◆ Low zener impedance
- ◆ Low regulation factor
- ◆ Glass passivated junction
- ◆ High temperature soldering guaranteed:
260°C/10S at terminals

MECHANICAL DATA

Case: MINI MELF molded glass body

Terminals: Plated axial leads, solderable per MIL-STD 750, method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.002 ounce,0.05 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	VALUE	UNITS
Zener Current see Table Characteristics			
Power Dissipation at Tamb=25°C(Note 1)	P _{tot}	500	mW
Junction Temperature	T _j	200	°C
Storage Temperature Range	T _{STG}	-65 to + 200	°C
Thermal resistance junction ambient(Note 1)	R _{θJA}	0.3	K/mW
Forward voltage at I _F =200mA	V _F	1.1	V

Note 1: Valid provided that leads at a distance of 10mm from case are kept at ambient temperature

Data Sheet 2596, Rev. -

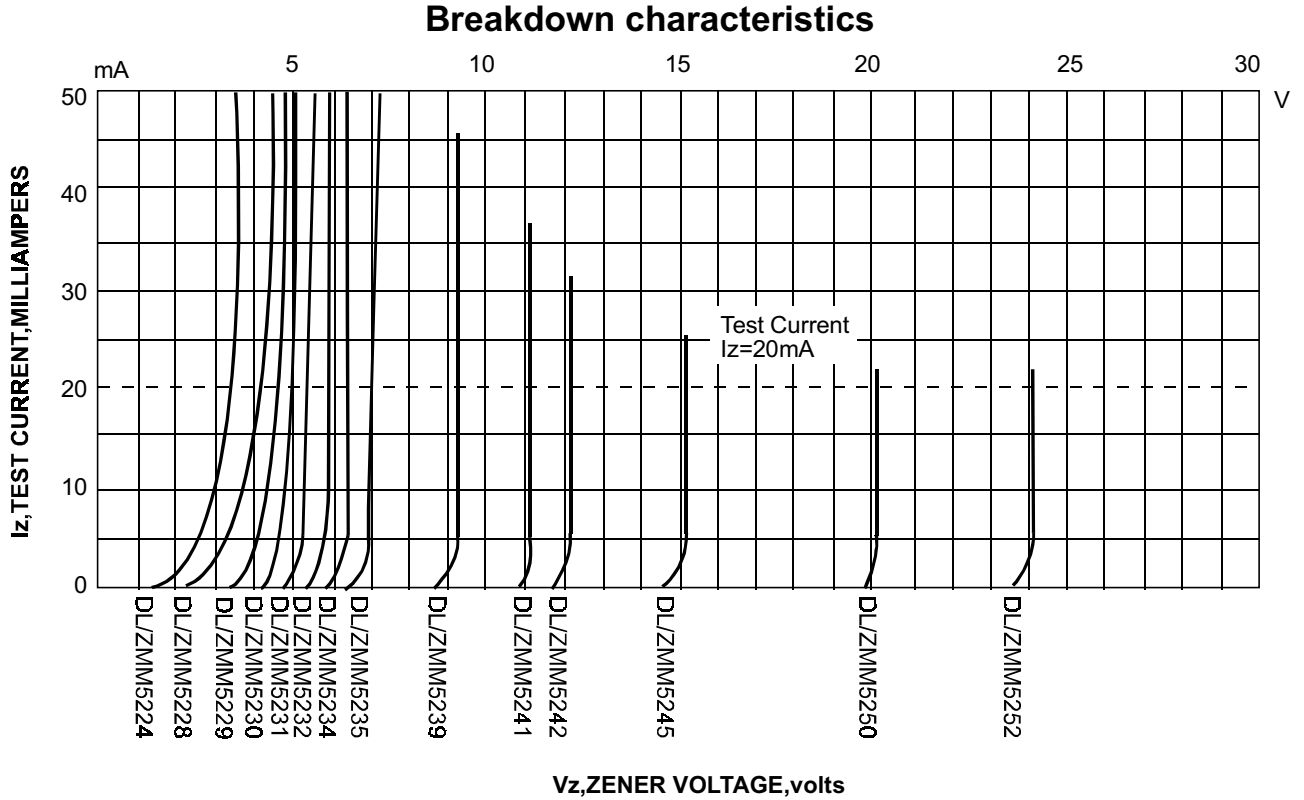
ELECTRICAL CHARACTERISTICS (at TA=25°C unless otherwise noted)

Device Type	Nominal Zener Voltage Vz@IzT (Volts)	Test Current IzT (mA)	Maximum Zener Impedance		Maximum Reverse Leakage Current		Typical Temperature Coefficient (%/°C)	Maximum Regulator Current IzM (mA)
			ZzT@IzT	Zzk@Izk=0.25mA	IR	@VR		
			Ohms	Ohms	µA	Volts		
DL5221B/ZMM5221B	2.4	20	30	1200	100	1.0	-0.085	191
DL5222B/ZMM5222B	2.5	20	30	1250	100	1.0	-0.085	182
DL5223B/ZMM5223B	2.7	20	30	1300	75	1.0	-0.080	168
DL5224B/ZMM5224B	2.8	20	30	1400	75	1.0	-0.080	162
DL5225B/ZMM5225B	3.0	20	29	1600	50	1.0	-0.075	151
DL5226B/ZMM5226B	3.3	20	28	1600	25	1.0	-0.070	138
DL5227B/ZMM5227B	3.6	20	24	1700	15	1.0	-0.065	126
DL5228B/ZMM5228B	3.9	20	23	1900	10	1.0	-0.060	115
DL5229B/ZMM5229B	4.3	20	22	2000	5.0	1.0	±0.055	106
DL5230B/ZMM5230B	4.7	20	19	1900	5.0	2.0	±0.030	97
DL5231B/ZMM5231B	5.1	20	17	1600	5.0	2.0	±0.030	89
DL5232B/ZMM5232B	5.6	20	11	1600	5.0	3.0	+0.038	81
DL5233B/ZMM5233B	6.0	20	7	1600	5.0	3.5	+0.038	76
DL5234B/ZMM5234B	6.2	20	7	1000	5.0	4.0	+0.045	73
DL5235B/ZMM5235B	6.8	20	5	750	3.0	5.0	+0.050	67
DL5236B/ZMM5236B	7.5	20	6	500	3.0	6.0	+0.058	61
DL5237B/ZMM5237B	8.2	20	8	500	3.0	6.5	+0.062	55
DL5238B/ZMM5238B	8.7	20	8	600	3.0	6.5	+0.065	52
DL5239B/ZMM5239B	9.1	20	10	600	3.0	7.0	+0.068	50
DL5240B/ZMM5240B	10	20	17	600	3.0	8.0	+0.075	45
DL5241B/ZMM5241B	11	20	22	600	2.0	8.4	+0.076	41
DL5242B/ZMM5242B	12	20	30	600	1.0	9.1	+0.077	38
DL5243B/ZMM5243B	13	9.5	13	600	0.5	9.9	+0.079	35
DL5244B/ZMM5244B	14	9.0	15	600	0.1	10	+0.082	32
DL5245B/ZMM5245B	15	8.5	16	600	0.1	11	+0.082	30
DL5246B/ZMM5246B	16	7.8	17	600	0.1	12	+0.083	28
DL5247B/ZMM5247B	17	7.4	19	600	0.1	13	+0.084	27
DL5248B/ZMM5248B	18	7.0	21	600	0.1	14	+0.085	25
DL5249B/ZMM5249B	19	6.6	23	600	0.1	14	+0.085	24
DL5250B/ZMM5250B	20	6.2	25	600	0.1	15	+0.086	23
DL5251B/ZMM5251B	22	5.6	29	600	0.1	17	+0.087	21.2
DL5252B/ZMM5252B	24	5.2	33	600	0.1	18	+0.088	19.1
DL5253B/ZMM5253B	25	5.0	35	600	0.1	19	+0.089	18.2
DL5254B/ZMM5254B	27	4.6	41	600	0.1	21	+0.090	16.8
DL5255B/ZMM5255B	28	4.5	44	600	0.1	21	+0.091	16.2
DL5256B/ZMM5256B	30	4.2	49	600	0.1	23	+0.091	15.1
DL5257B/ZMM5257B	33	3.8	58	700	0.1	25	+0.092	13.8
DL5258B/ZMM5258B	36	3.4	70	700	0.1	27	+0.093	12.6
DL5259B/ZMM5259B	39	3.2	80	800	0.1	30	+0.094	11.5
DL5260B/ZMM5260B	43	3.0	93	900	0.1	33	+0.095	10.6
DL5261B/ZMM5261B	47	2.7	150	1000	0.1	36	+0.095	9.7
DL5262B/ZMM5262B	51	2.5	125	1100	0.1	39	+0.096	8.9
DL5263B/ZMM5263B	56	2.2	150	1300	0.1	43	+0.096	8.1

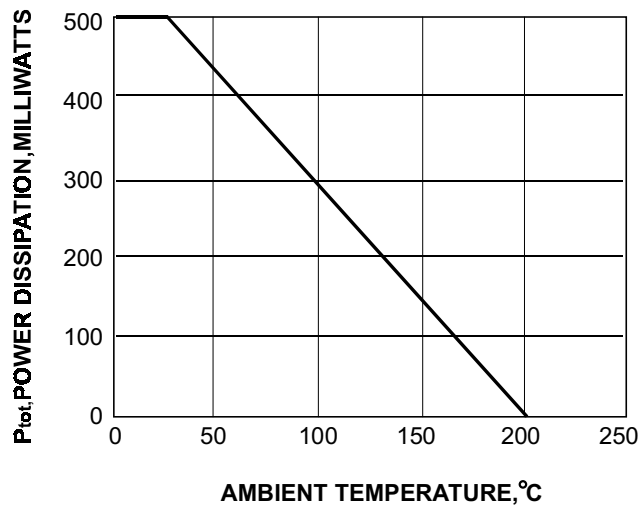
Note 1: Suffix "B" indicate ±5% tolerance

- 221 West Industry Court ■ Deer Park, NY 11729-4681 ■ (631) 586-7600 FAX (631) 242-9798 •
- World Wide Web Site - <http://www.sensitron.com> • E-Mail Address - sales@sensitron.com •

RATINGS AND CHARACTERISTIC CURVES DL/ZMM52 SERIES



Admissible power dissipation versus ambient temperature
Valid provided that leads are kept at ambient temperature at a distance of 10mm from case



TECHNICAL DATA

DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.