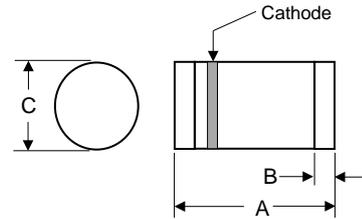


### Features

- \* MiniMELF case especially for automatic insertion.
- \* These diodes are also available in DO-35 case with the type designation BZX55B...



**RoHS**  
COMPLIANT



LL-34				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.134	0.142	3.40	3.60
B	0.008	0.016	0.20	0.40
C	0.055	0.059	1.40	1.50

### Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Power Dissipation	P <sub>tot</sub>	500 <sup>1)</sup>	mW
Junction Temperature	T <sub>j</sub>	175	°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to + 175	°C

Note:1) Valid provided that electrodes are kept at ambient temperature

### Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	0.3 <sup>1)</sup>	K/mW
Forward Voltage at I <sub>F</sub> = 100 mA	V <sub>F</sub>	1	V

Note:1) Valid provided that electrodes are kept at ambient temperature

### Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Type	Zener Voltage Range <sup>1)</sup>			Dynamic Resistance			Reverse Leakage Current			Temp coefficient of Zener Voltage
	V <sub>Znom</sub>	V <sub>ZT</sub>	at I <sub>ZT</sub>	Z <sub>TT</sub>	Z <sub>ZK</sub>	at I <sub>ZK</sub>	T <sub>a</sub> = 25 °C	T <sub>a</sub> = 125 °C	at V <sub>R</sub>	
	(V)	(V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	Max. (μA)	(V)	
ZMM1B <sup>2)</sup>	0.75	0.73...0.77	5	8	50	1	-	-	-	-0.26...-0.23
ZMM2B0	2	1.96...2.04	5	85	600	1	100	200	1	-0.09...-0.06
ZMM2B2	2.2	2.16...2.24	5	85	600	1	75	160	1	-0.09...-0.06
ZMM2B4	2.4	2.35...2.45	5	85	600	1	50	100	1	-0.09...-0.06
ZMM2B7	2.7	2.65...2.75	5	85	600	1	10	50	1	-0.09...-0.06
ZMM3B0	3	2.94...3.06	5	85	600	1	4	40	1	-0.08...-0.05
ZMM3B3	3.3	3.23...3.37	5	85	600	1	2	40	1	-0.08...-0.05
ZMM3B6	3.6	3.53...3.67	5	85	600	1	2	40	1	-0.08...-0.05
ZMM3B9	3.9	3.82...3.98	5	85	600	1	2	40	1	-0.08...-0.05
ZMM4B3	4.3	4.21...4.39	5	75	600	1	1	20	1	-0.06...-0.03
ZMM4B7	4.7	4.61...4.79	5	60	600	1	0.5	10	1	-0.05...+0.02
ZMM5B1	5.1	5...5.2	5	35	550	1	0.1	2	1	-0.02...+0.02
ZMM5B6	5.6	5.49...5.71	5	25	450	1	0.1	2	1	-0.05...+0.05
ZMM6B2	6.2	6.08...6.32	5	10	200	1	0.1	2	2	0.03...0.06
ZMM6B8	6.8	6.66...6.94	5	8	150	1	0.1	2	3	0.03...0.07
ZMM7B5	7.5	7.35...7.65	5	7	50	1	0.1	2	5	0.03...0.07
ZMM8B2	8.2	8.04...8.36	5	7	50	1	0.1	2	6.2	0.03...0.08
ZMM9B1	9.1	8.92...9.28	5	10	50	1	0.1	2	6.8	0.03...0.09
ZMM10B	10	9.8...10.2	5	15	70	1	0.1	2	7.5	0.03...0.1
ZMM11B	11	10.78...11.22	5	20	70	1	0.1	2	8.2	0.03...0.11
ZMM12B	12	11.76...12.24	5	20	90	1	0.1	2	9.1	0.03...0.11
ZMM13B	13	12.74...13.26	5	26	110	1	0.1	2	10	0.03...0.11
ZMM15B	15	14.7...15.3	5	30	110	1	0.1	2	11	0.03...0.11
ZMM16B	16	15.68...16.32	5	40	170	1	0.1	2	12	0.03...0.11
ZMM18B	18	17.64...18.36	5	50	170	1	0.1	2	13	0.03...0.11
ZMM20B	20	19.6...20.4	5	55	220	1	0.1	2	15	0.03...0.11
ZMM22B	22	21.56...22.44	5	55	220	1	0.1	2	16	0.04...0.12
ZMM24B	24	23.52...24.48	5	80	220	1	0.1	2	18	0.04...0.12
ZMM27B	27	26.46...27.54	5	80	220	1	0.1	2	20	0.04...0.12
ZMM30B	30	29.4...30.6	5	80	220	1	0.1	2	22	0.04...0.12
ZMM33B	33	32.34...33.66	5	80	220	1	0.1	2	24	0.04...0.12
ZMM36B	36	35.28...36.72	5	80	220	1	0.1	2	27	0.04...0.12
ZMM39B	39	38.22...39.78	2.5	90	500	0.5	0.1	5	30	0.04...0.12
ZMM43B	43	42.14...43.86	2.5	90	500	0.5	0.1	5	33	0.04...0.12
ZMM47B	47	46.06...47.94	2.5	110	600	0.5	0.1	5	36	0.04...0.12
ZMM51B	51	49.98...52.02	2.5	125	700	0.5	0.1	10	39	0.04...0.12
ZMM56B	56	54.88...57.12	2.5	135	700	0.5	0.1	10	43	0.04...0.12
ZMM62B	62	60.76...63.24	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
ZMM68B	68	66.64...69.36	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
ZMM75B	75	73.5...76.5	2.5	250	1000	0.5	0.1	10	56	0.04...0.12

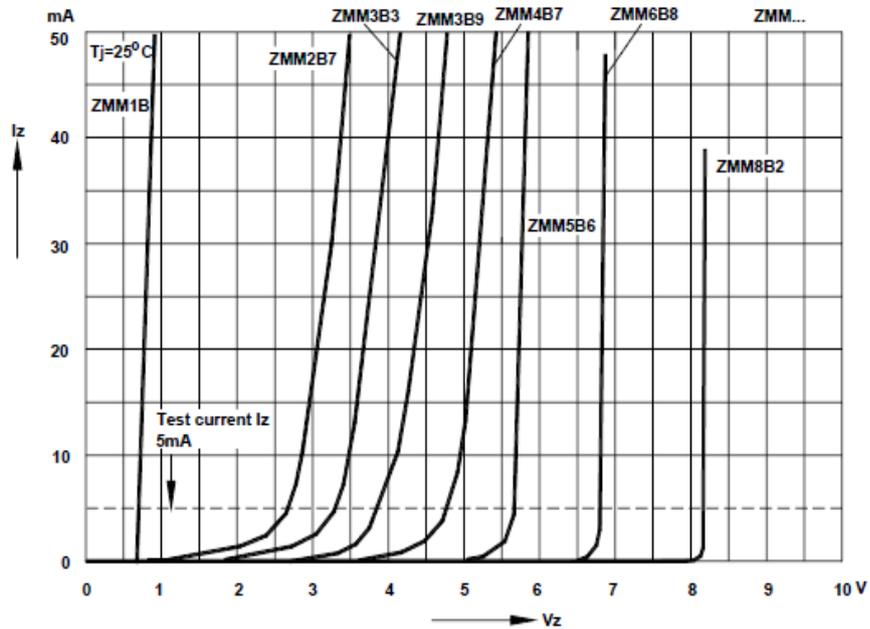
Note:

- 1) Tested with pulses t<sub>p</sub> = 20 ms.
- 2) The ZMM1B is a silicon diode with operation in forward direction. Hence, the index of all parameters should be "F" instead of "Z".  
Connect the cathode electrode to the negative pole.

### Ratings and Characteristic Curves

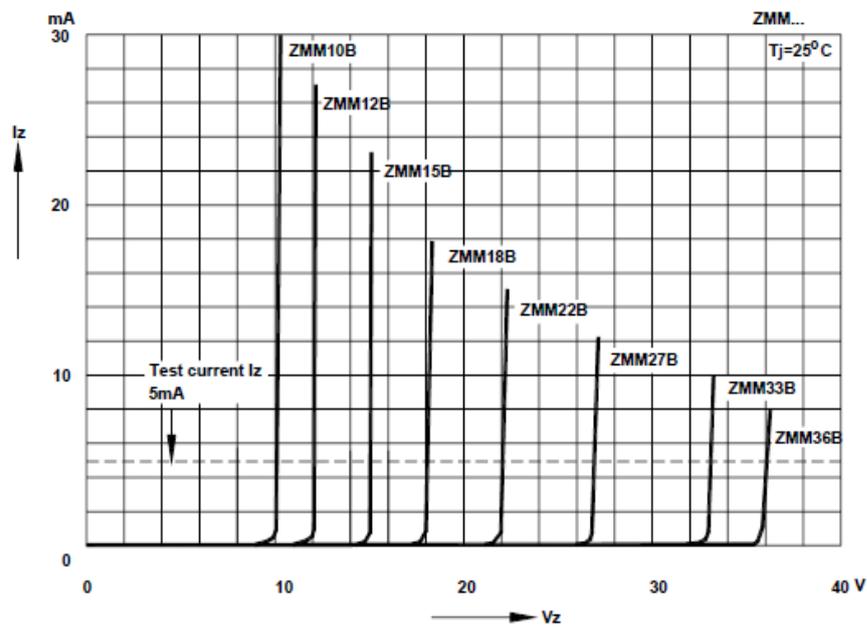
Breakdown characteristics

$T_j = \text{constant (pulsed)}$



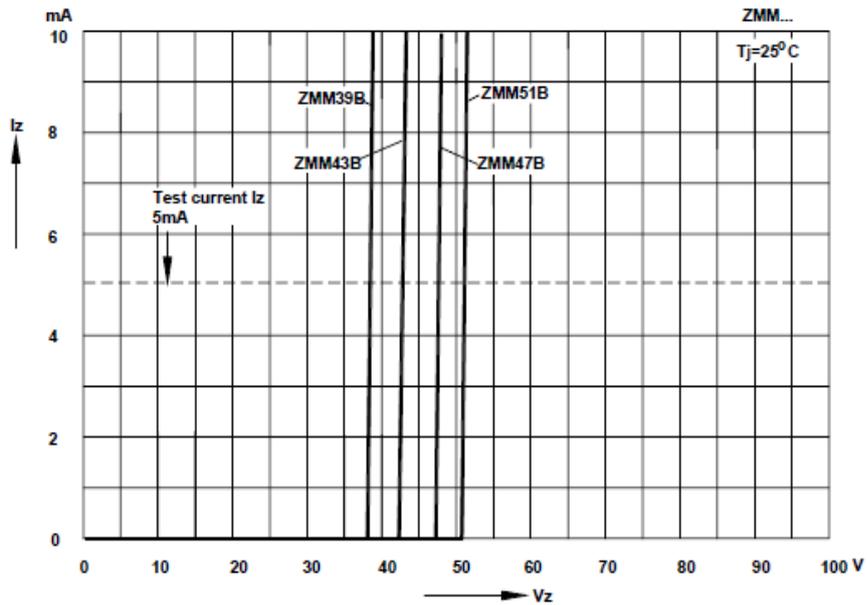
Breakdown characteristics

$T_j = \text{constant (pulsed)}$

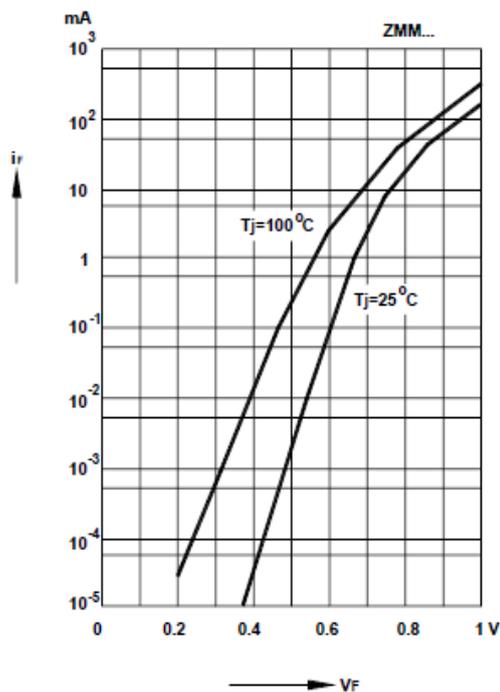


### Ratings and Characteristic Curves

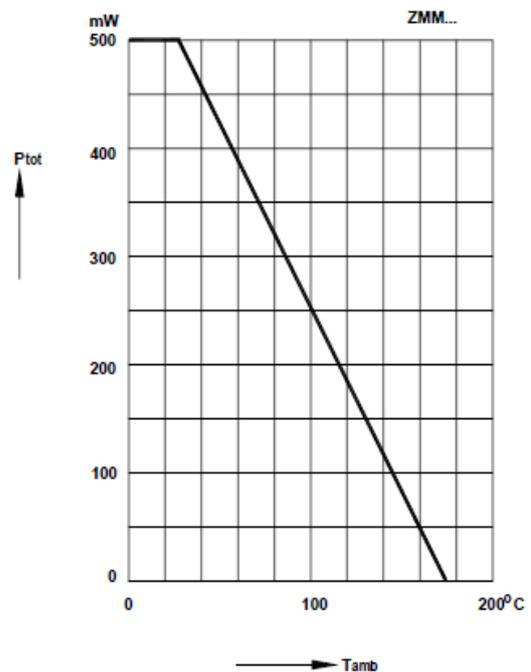
Breakdown characteristics  
 $T_j = \text{constant (pulsed)}$



Forward characteristics



Admissible power dissipation versus ambient temperature  
 Valid provided that electrodes are kept at ambient temperature.





## ZMM1B THRU ZMM75B

### *Silicon Epitaxial Planar Zener Diodes*

#### Ordering Information

Part No.	Package	Packing Code	Packing
ZMM1B THRU ZMM75B	LL-34	R25	2500pcs/Reel

#### Disclaimer

Specifications of the products displayed herein are subject to change without notice. JGD or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in JGD's terms and conditions of sale for such products, JGD assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of JGD products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify JGD for any damages resulting from such improper use or sale.