

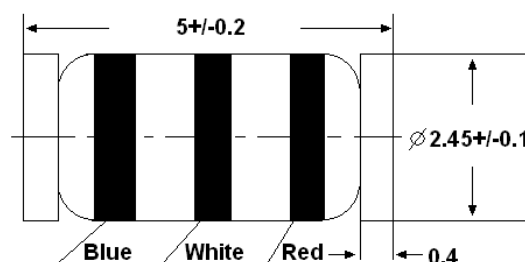
ZMY5B1...ZMY39B(1W)

SILICON PLANAR POWER ZENER DIODES

for use in stabilizing and clipping circuits with high power rating. The Zener voltages are graded according to the international E 24 standard. Smaller voltage tolerances are upon request.

These diodes are delivered taped.
Details see "Taping".

LL-41



Glass case MELF
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

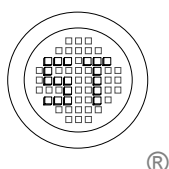
	Symbol	Value	Unit
Power Dissipation	P_{tot}	1 ¹⁾	W
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +175	$^\circ\text{C}$

¹⁾ Valid provided that electrodes are kept at ambient temperature.

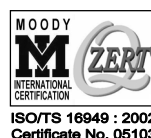
Characteristics at $T_{\text{amb}} = 25^\circ\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	-	-	170 ¹⁾	K/W

¹⁾ Valid provided that electrodes are kept at ambient temperature.



SEMTECH ELECTRONICS LTD.
(Subsidiary of Semtech International Holdings Limited, a company
listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



ISO 9001 : 2000
Certificate No. 558-188-A2-RSC-Pak

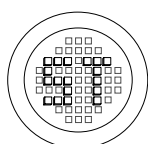
Dated : 09/09/2005

ZMY5B1...ZMY39B(1W)

TYPE	Zener voltage ²⁾ at I_{ZT} V_Z (V)	Dynamic Resistance at I_{ZT} , $f = 1\text{kHz}$ $r_{zj}\Omega$	Temp. coeff. of Zener volt. at I_{ZT} ; $\frac{V_Z}{V} \times 10^{-4}/K$	Test current I_{ZT} (mA)	Maximum reverse leakage current at $I_R (\mu A)$ $V_R (V)$		Admissible Zener current ¹⁾ at $T_{amb} = 25^\circ C$ I_Z (mA)
ZMY5B1	4.99...5.20	2(<5)	-6...+5	100	10	1	150
ZMY5B6	5.49...5.71	1(<2)	-3...+5	100	0.5	2	135
ZMY6B2	6.07...6.32	1(<2)	-1...+6	100	0.5	3	128
ZMY6B8	6.66...6.94	1(<2)	0...+7	100	0.5	4	110
ZMY7B5	7.35...7.65	1(<2)	0...+7	100	0.5	5	100
ZMY8B2	8.04...8.36	1(<2)	+3...+8	100	0.5	6	89
ZMY9B1	8.92...9.28	2(<4)	+3...+8	50	0.5	7	82
ZMY10B	9.8...10.2	2(<4)	+5...+9	50	0.5	7.6	74
ZMY11B	10.8...11.2	3(<7)	+5...+10	50	0.5	8.4	66
ZMY12B	11.8...12.2	3(<7)	+5...+10	50	0.5	9.1	60
ZMY13B	12.7...13.3	4(<9)	+5...+10	50	0.5	9.9	55
ZMY15B	14.7...15.3	4(<9)	+5...+10	50	0.5	11.4	49
ZMY16B	15.7...16.3	5(<10)	+7...+11	25	0.5	12.2	44
ZMY18B	17.6...18.4	5(<11)	+7...+11	25	0.5	13.7	40
ZMY20B	19.6...20.4	6(<12)	+7...+11	25	0.5	15.2	36
ZMY22B	21.6...22.5	7(<13)	+7...+11	25	0.5	16.7	34
ZMY24B	23.5...24.5	8(<14)	+7...+12	25	0.5	18.2	29
ZMY27B	26.4...27.6	9(<15)	+7...+12	25	0.5	20.6	27
ZMY30B	29.4...30.6	10(<20)	+7...+12	25	0.5	22.8	25
ZMY33B	32.3...33.7	11(<20)	+7...+12	25	0.5	25.1	22
ZMY36B	35.2...36.8	25(<60)	+7...+12	10	0.5	27.4	20
ZMY39B	38.2...39.8	30(<60)	+8...+12	10	0.5	29.7	18

1) Valid provided that electrodes are kept at ambient temperature.

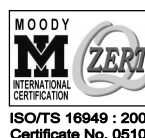
2) Tested with pulses $t_p = 20$ ms



®

SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company
listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 09/09/2005