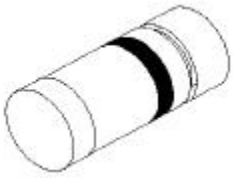
SILICON PLANAR POWER ZENER DIODES

ZMY4.7 - ZMY100

LL-41 (MELF)
GLASS PACKAGE



For use in Stabilizing and Clipping Circuits with High Power Rating

Hermetically Sealed, Glass Silicon Diodes

Marking: With Cathode Band

ABSOLUTE MAXIMUM RATINGS (T_a=25ºC)

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation	*P_D	1.3	W
Non Repetitive Peak Power Disspation, t <10ms	P_{zsm}	5.0	W
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	- 55 to +175	°C

THERMAL CHARACTERISTICS

Junction to Ambient in free air	*$R_{th\ (j-a)}$	115.3	K/W

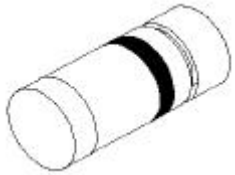
ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise) **V_F <1.2V at 200mA**

Device #	**Zener Voltage		Dynamic Resistance	Temp. Coeff. of Zener volt.	Test Current	Reverse Voltage	*Admissible Zener Current at I_Z test
	V_Z at I_{ZT}		at I_Z test f=1kHz	at I_Z test	at I_Z test	I_R = 0.5mA	
	(V)		r_{zj} (W)	a V_Z 10^{-4}/K	(mA)	V_R (V)	(mA)
	min	max	max				
ZMY4.7	4.4	5.0	7	-7.....+4	100	>0.5	165
ZMY5.1	4.8	5.4	5	-6.....+5	100	>0.7	150
ZMY5.6	5.2	6.0	2	-3.....+5	100	>1.5	135
ZMY6.2	5.8	6.6	2	-1.....+6	100	>2.0	128
ZMY6.8	6.4	7.2	2	0.....7	100	>3.0	110
ZMY7.5	7.0	7.9	2	0.....7	100	>5.0	100
ZMY8.2	7.7	8.7	2	+3.....+8	100	>6.0	89
ZMY9.1	8.5	9.6	4	+3.....+8	50	>7.0	82
ZMY10	9.4	10.6	4	+5.....+9	50	>7.5	74
ZMY11	10.4	11.6	7	+5.....+10	50	>8.5	66
ZMY12	11.4	12.7	7	+5.....+10	50	>9.0	60
ZMY13	12.4	14.1	9	+5.....+10	50	>10	55
ZMY15	13.8	15.8	9	+5.....+10	50	>11	49
ZMY16	15.3	17.1	10	+7.....+11	25	>12	44
ZMY18	16.8	19.1	11	+7.....+11	25	>14	40
ZMY20	18.8	21.2	12	+7.....+11	25	>15	36
ZMY22	20.8	23.3	13	+7.....+11	25	>17	34
ZMY24	22.8	25.6	14	+7.....+12	25	>18	29
ZMY27	25.1	28.9	15	+7.....+12	25	>20	27
ZMY30	28.0	32.0	20	+7.....+12	25	>22.5	25
ZMY33	31.0	35.0	20	+7.....+12	25	>25	22
ZMY36	34.0	38.0	60	+7.....+12	10	>27	20

***Valid provided that electrodes are kept at ambient temperature**

****Pulse Condition : 20ms ≤ tp ≤50ms**

ZMY4.7_100V Rev081105E



LL-41 (MELF)
GLASS PACKAGE

ELECTRICAL ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise) **V_F <1.2V at 200mA**

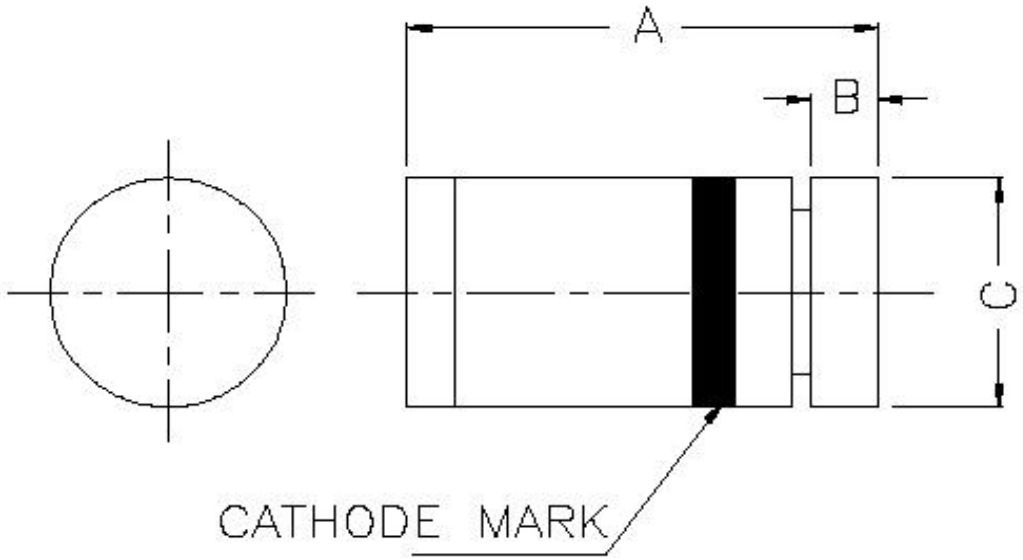
Device #	**Zener Voltage		Dynamic Resistance	Temp. Coeff. of Zener volt.	Test Current	Reverse Voltage	*Admissible Zener Current
	V_Z at I_{ZT}		at I_Z test	at I_Z test	at I_Z test	I_R = 0.5mA	at I_Z test
	(V)		r_{zj} (W)	a V_Z 10^{-4}/K	(mA)	V_R (V)	(mA)
	min	max	max				
ZMY39	37.0	41.0	60	+8…..+12	10	>29	18
ZMY43	40.0	46.0	80	+8…..+13	10	>32	17
ZMY47	44.0	50.0	80	+8…..+13	10	>35	15
ZMY51	48.0	54.0	100	+8…..+13	10	>38	14
ZMY56	52.0	60.0	100	+8…..+13	10	>42	13
ZMY62	58.0	66.0	130	+8…..+13	10	>47	11
ZMY68	64.0	72.0	130	+8…..+13	10	>51	10
ZMY75	70.0	79.0	160	+8…..+13	10	>56	9
ZMY82	77.0	88.0	160	+8…..+13	10	>61	8
ZMY91	85.0	96.0	250	+9…..+13	5	>68	7.5
ZMY100	94.0	106	250	+9…..+13	5	>75	7

***Valid provided that electrodes are kept at ambient temperature**
****Pulse Condition : 20ms ≤ tp ≤50ms**

ZMY4.7_100V Rev081105E

LL-41 (MELF)
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PACKAGE LL–41 MELF



DIM	MIN.	MAX.
A	4.8	5.2
B	0.4	–
C	ø2.35	ø2.55

All dimensions are in mm

PACKING:– 5K/REEL

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.

2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

ZMY4.7_100V Rev081105E

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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