

MMDB3/MMDC34/MMDB4/MMDB6

BIDIRECTIONAL DIODE THYRISTOR

FEATURES

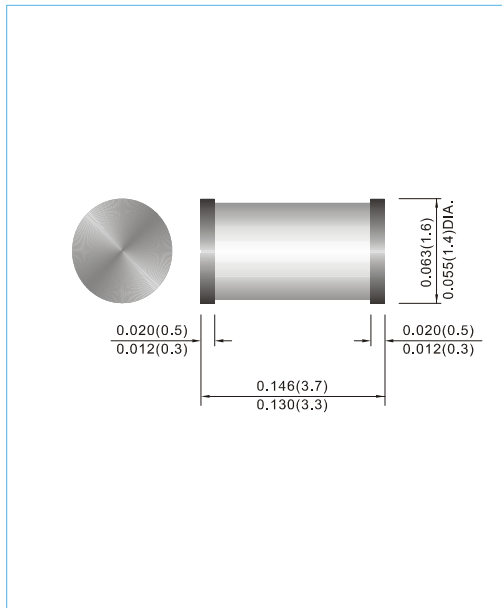
- Low breakover current.
- Trigger diode with a fixed voltage reference.
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: Molded Glass MINI-MELF
- Terminals: Solderable per MIL-STD-750, Method 2026

MINI-MELF / LL34

Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J = 25°C unless otherwise noted)

Symbol	Parameter	MMDB3	MMDC34	MMDB4	MMDB6	Units
P _C	Power Dissipation on Printrd Circuit(L=10mm) T _A =50°C	150				mW
I _{TRM}	Repetive Peak in-state Current tp=10us F=100Hz	2.0	2.0	2.0	1.6	A
T _{STG} /T _J	Storage and Operating JuntionTemperature	-40 to 125/-40 to 110				°C

Symbol	Parameter	Test Conditions	MMDB3	MMDC34	MMDB4	MMDB6	Units	
V _(BO)	Breakdown Voltage(Note 2)	c=22nF (Note 2) See diagram1	Min	28	30	35	56	V
			Typ	32	34	40	60	
			Max	36	38	45	70	
+V _{BO} - V _{BO}	Breakover voltage symmetry	c=22nF (Note 2) See diagram1	Max	±3		±4	V	
±ΔV	Dynamic breakover voltage	ΔI = I _{BO} to I _F =10mA See diagram1	Min	5		10	V	
V _O	Output Voltage (Note 1)	See diagram 2	Min	5			V	
I _{BO}	Breakover current (Note 1)	c=22nF (Note 2)	Max	100			μA	
t _r	Rise Time (Note 1)	See diagram 3	typ	1.5			μS	
I _B	Leakage current (Note 1)	V _B =0.5V _{BO} max see diagram 1	Max	10			μA	

NOTE 1. GELECTRICAL CHARACTERISTIC APPLICABLE IN BOTH FORWARD AND REVERSE DIRECTIONS.

NOTE 2. GCONNECTED IN PARALLEL WITH DEVICESC.

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RATINGS AND CHARACTERISTIC CURVES DB3/DC34/DB4/DB6

DIAGRAM 1: Current-voltage characteristics

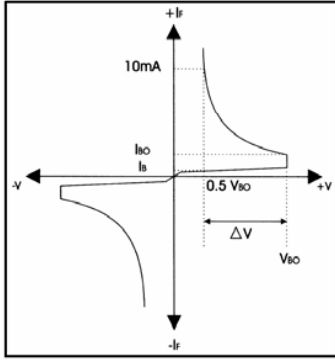


FIG.1-Power dissipation versus ambient temperature(maximum values)

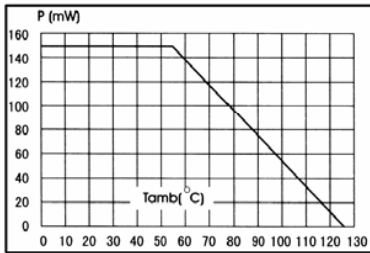


FIG.3-Peak pulse current versus pulse duration (maximum values)

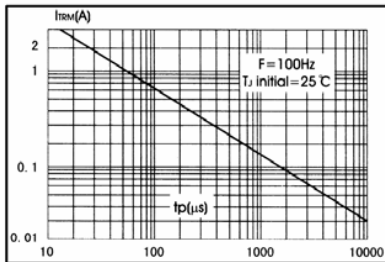


DIAGRAM 2: Test circuit for output voltage

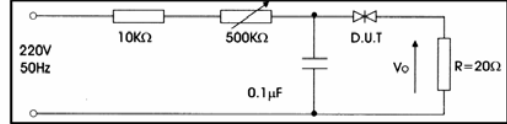


DIAGRAM 3: Test circuit see diagram2 adjust R for $I_p=0.5A$

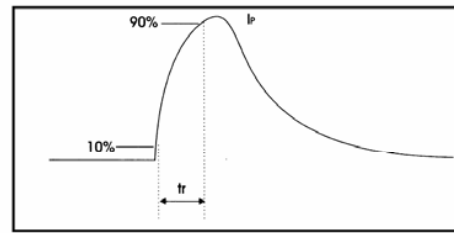
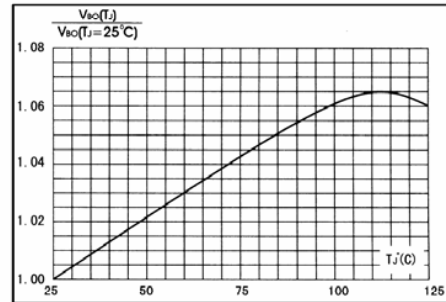
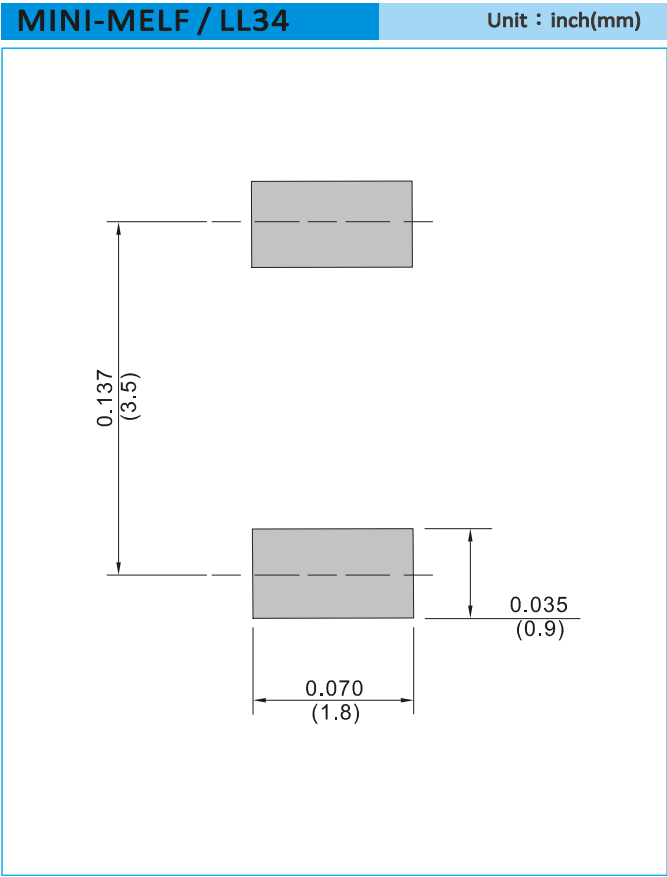


FIG.2-Relative variation of VBO versus junction temperature(typical values)



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 10K per 13" plastic Reel
T/R - 2.5K per 7" plastic Reel

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