

MINI MELF Glass-Encapsulate Diodes

Silicon bidirectional diac

Features

- VBO 28V-45V

MINI MELF(SOD-80/ LL- 34)



Limiting Values (Absolute Maximum Rating)

PARAMETERS	SYMBOL	VALUE	UNITS
		LLDB3 / LLDB4	
Power Dissipation on Printed Cir cuit(L=10mm) $T_A=50^{\circ}\text{C}$	P_c	150	mW
Repetitive Peak on-state Current $T_p=10\mu\text{S}$ $f=100\text{Hz}$	I_{TRM}	2.0	A
Storage and Operating Juntion Temperature	T_{STG}/T_J	-40 to +125	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

PAPRAMETERS	SYMBOLS	TEST CONDITIONS		VALUE		UNITS
				LLDB3	LLDB4	
Breakover Voltage*	V _{BO}	C=22nf** See Diagram 1	Min	28	35	V
			Typ	32	45	
			Max	36	45	
Breakover Voltage Symmetry	1+V _{BO1} - 1-V _{BO1}	C=22nf** See Diagram 1	Max	± 3		V
Dynamic Breakover Voltage	1±ΔV ₁	ΔI=(I _{BO} to I _F =10mA) See FIG 1	Min	5		V
Output Voltage*	V _O	See FIG 2	Min	5		V
Breakover Current*	I _{BO}	C=22nf**	Max	100		uA
Rise Time*	tr	See FIG 3	Typ	1.5		uS
Leakage Current*	I _B	I _B =0.5 V _{BO} MAX See FIG 3	Max	10		uA

NOTE:* Electrical characteristics applicable in both forward and reverse directions.

** Connected in parallel with the devices.

Typical Characteristics

FIG.1-CURRENT-VOLTAGE CHARACTERISTICS

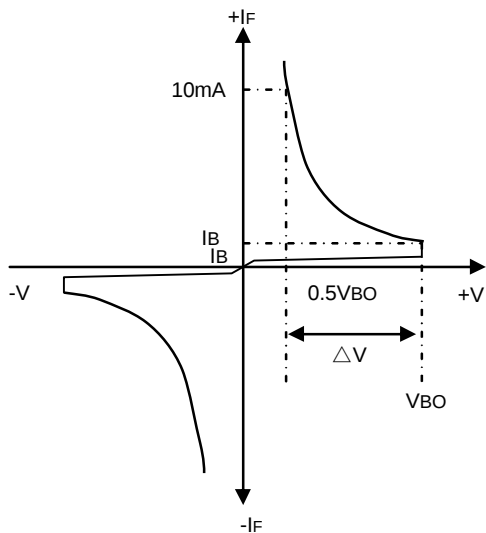


FIG.2-TEST CIRCUIT FOR OUTPUT VOLTAGE

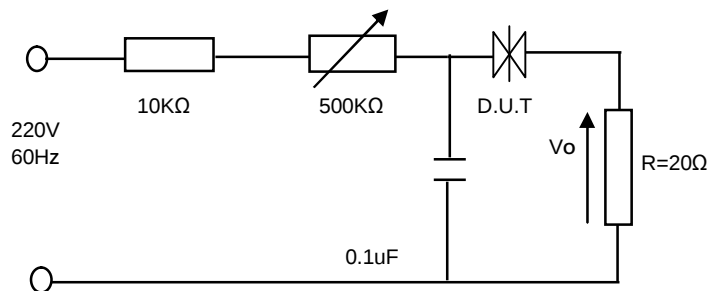


FIG.3-TEST CIRCUIT SEE FIG.2 ADJUST R FOR $I_p=0.5A$

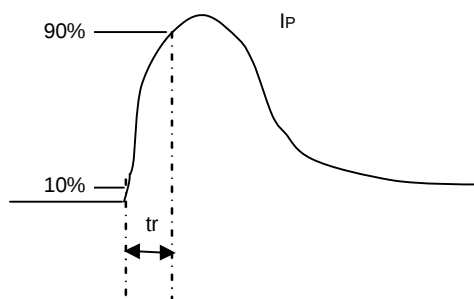


FIG.4-TEST CIRCUIT FOR OUTPUT

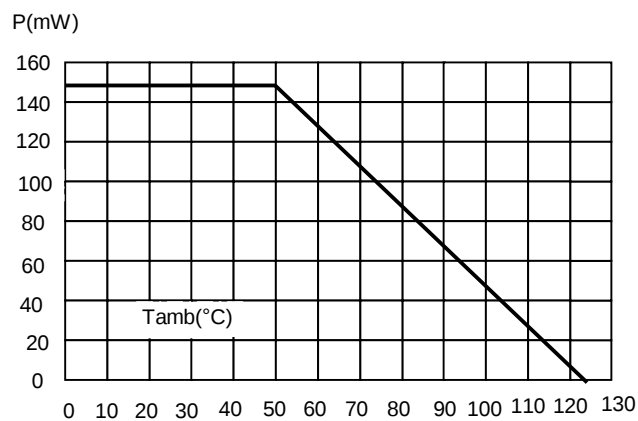


FIG.5-RELATIVE VARIATION OF VBO VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

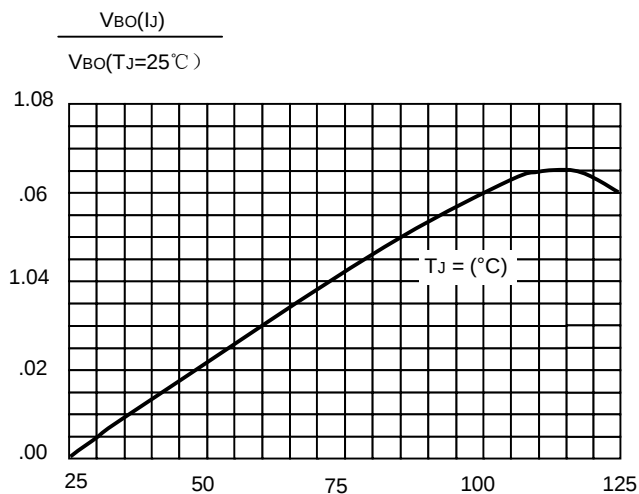
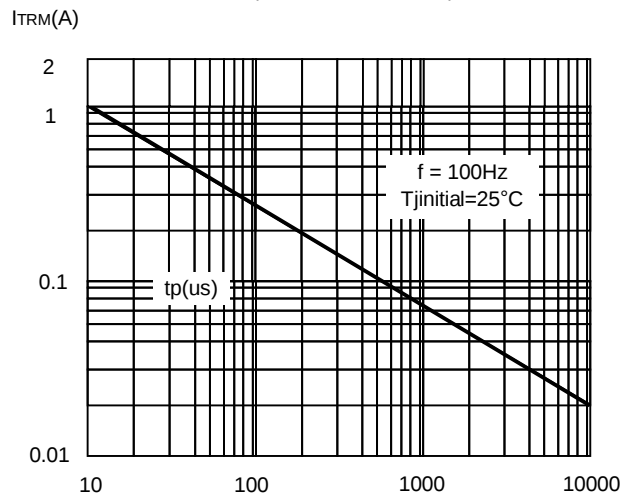
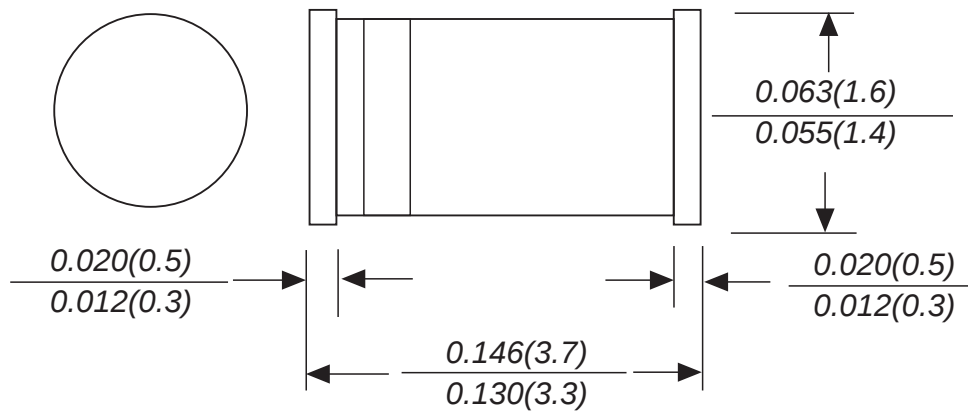


FIG.6-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

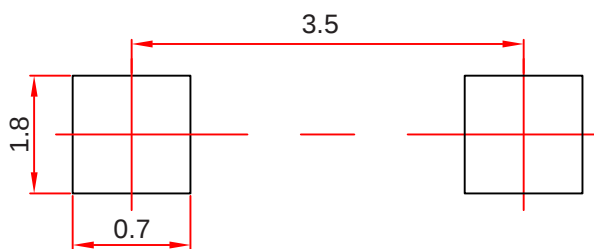


MINI MELF Package Outline Dimensions



Dimensions in millimeters

MINI MELF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

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Packaging Specifications for Surface Mounted Glass Diodes

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)

