

200mW , Hermetically Sealed Glass Fast Switching Schottky Barrier Diodes

FEATURES

- Low forward voltage
- Ideal for automated placement
- Compliant to RoHS directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21

APPLICATIONS

- Adapters
- For switching power supply
- Low stored charge
- Inverter

KEY PARAMETERS		
PARAMETER	VALUE	UNIT
P_D	200	mW
V_{RRM}	30	V
I_{FSM}	4	A
V_F at $I_F=100mA$	0.8	V
T_J Max.	125	°C
Package	MINI MELF	
Configuration	Single die	

MECHANICAL DATA

- Case: Mini-MELF
- Terminal: Matte tin plated leads, solderable per J-STD-002
- Meet JESD 201 class 1A whisker test
- Polarity: Indicated by cathode band



ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	BAS85	UNIT
Power dissipation	P_D	200	mW
Repetitive peak reverse voltage	V_{RRM}	30	V
Maximum DC blocking voltage	V_R	30	V
Average forward rectified current	$I_{F(AV)}$	200	mA
Peak forward surge current	I_{FSM}	4	A
Junction temperature range	T_J	-65 to +125	°C
Storage temperature range	T_{STG}	-65 to +125	°C

ELECTRICAL SPECIFICATIONS ($T_A = 25^\circ\text{C}$ unless otherwise noted)						
PARAMETER	CONDITIONS	SYMBOL	MIN	TYP	MAX	UNIT
Reverse voltage ⁽²⁾	$I_R = 10 \mu\text{A}, T_J = 25^\circ\text{C}$	V_R	30	-	-	V
Reverse current ⁽²⁾	$V_R = 25 \text{V}, T_J = 25^\circ\text{C}$	I_R	-	-	2	μA
Forward voltage ⁽¹⁾	$I_F = 0.1\text{mA}, T_J = 25^\circ\text{C}$	V_F	-	-	0.24	V
	$I_F = 1\text{mA}, T_J = 25^\circ\text{C}$		-	-	0.32	
	$I_F = 10\text{mA}, T_J = 25^\circ\text{C}$		-	-	0.40	
	$I_F = 30\text{mA}, T_J = 25^\circ\text{C}$		-	-	0.50	
	$I_F = 100\text{mA}, T_J = 25^\circ\text{C}$		-	-	0.80	
Junction capacitance	1 MHz, $V_R=1\text{V}$	C_J	-	-	10	pF
Reverse recovery time	$I_F = I_R = 10\text{mA}$ $R_L = 100\Omega, I_{RR} = 1\text{mA}$	t_{rr}	-	5	-	ns

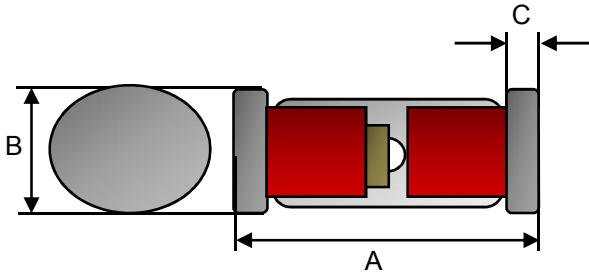
Notes:

1. Pulse test with PW=0.3 ms
2. Pulse test with PW=30 ms

ORDERING INFORMATION		
PART NO.	PACKAGE	PACKING
BAS85 L0	MINI MELF	10K / 13" Reel
BAS85 L0G	MINI MELF	10K / 13" Reel
BAS85 L1	MINI MELF	2.5K / 7" Reel
BAS85 L1G	MINI MELF	2.5K / 7" Reel

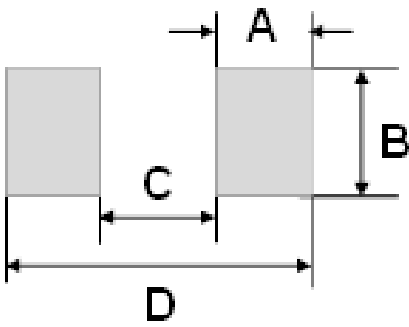
PACKAGE OUTLINE DIMENSION

Mini-MELF



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	3.30	3.70	0.130	0.146
B	1.40	1.60	0.055	0.063
C	0.20	0.50	0.008	0.020

SUGGEST PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
A	1.25	0.049
B	2.00	0.079
C	2.50	0.098
D	5.00	0.197

Notice

Specifications of the products displayed herein are subject to change without notice. TSC 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 TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC 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 TSC for any damages resulting from such improper use or sale.