

# BAS85 L1G Datasheet

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DiGi Electronics Part Number	BAS85 L1G-DG
Manufacturer	<a href="#">Taiwan Semiconductor Corporation</a>
Manufacturer Product Number	BAS85 L1G
Description	DIODE SCHOTT 30V 200MA MINI MELF
Detailed Description	Diode 30 V 200mA Surface Mount Mini MELF

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## Purchase and inquiry

Manufacturer Product Number:

BAS85 L1G

Series:

-

Technology:

Schottky

Current - Average Rectified (Io):

200mA

Speed:

Small Signal =< 200mA (Io), Any Speed

Current - Reverse Leakage @ Vr:

2  $\mu$ A @ 30 V

Mounting Type:

Surface Mount

Supplier Device Package:

Mini MELF

Manufacturer:

Taiwan Semiconductor Corporation

Product Status:

Obsolete

Voltage - DC Reverse (Vr) (Max):

30 V

Voltage - Forward (Vf) (Max) @ If:

800 mV @ 100 mA

Reverse Recovery Time (trr):

5 ns

Capacitance @ Vr, F:

10pF @ 1V, 1MHz

Package / Case:

DO-213AC, MINI-MELF, SOD-80

Operating Temperature - Junction:

125°C (Max)

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0070

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

## 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

### 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

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	



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

<b>ELECTRICAL SPECIFICATIONS</b> ( $T_A = 25^\circ\text{C}$ unless otherwise noted)						
<b>PARAMETER</b>	<b>CONDITIONS</b>	<b>SYMBOL</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNIT</b>
Reverse voltage <sup>(2)</sup>	$I_R = 10 \mu\text{A}, T_J = 25^\circ\text{C}$	$V_R$	30	-	-	V
Reverse current <sup>(2)</sup>	$V_R = 25 \text{V}, T_J = 25^\circ\text{C}$	$I_R$	-	-	2	$\mu\text{A}$
Forward voltage <sup>(1)</sup>	$I_F = 0.1\text{mA}, T_J = 25^\circ\text{C}$	$V_F$	-	-	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

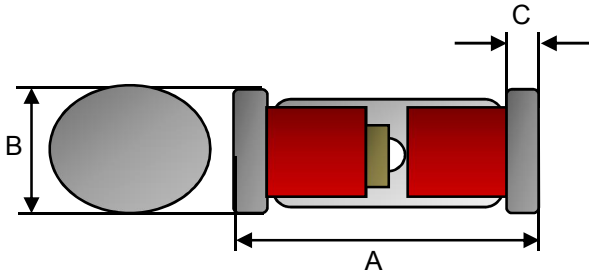
**Notes:**

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

<b>ORDERING INFORMATION</b>		
<b>PART NO.</b>	<b>PACKAGE</b>	<b>PACKING</b>
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

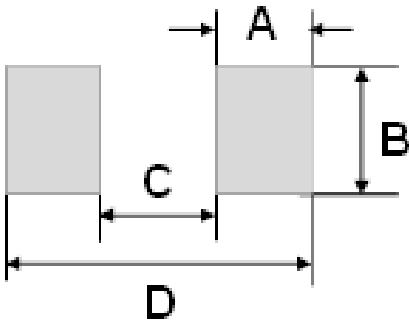
**PACKAGE OUTLINE DIMENSION**

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

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