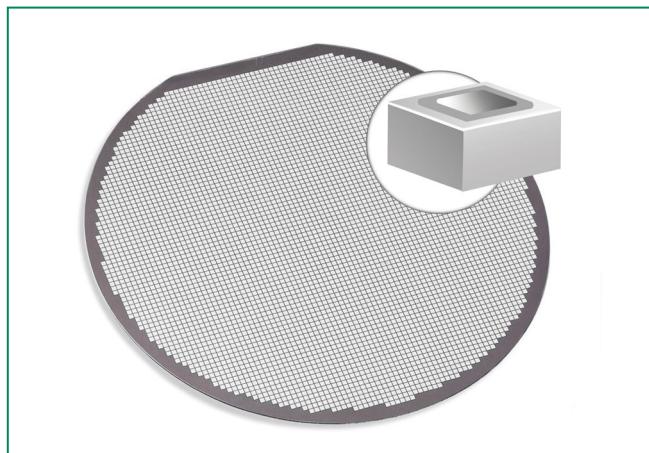


WB07B0606LG-0

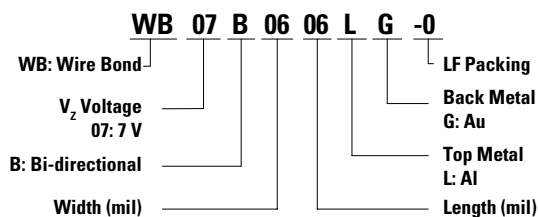
Wire Bond Zener Diode Die, 7 V Bi-directional for ESD Protection



Absolute Maximum Ratings

Symbol	Parameter	Value	Units
I_{PP}	Peak Current ($t_p=8/20 \mu s$)	3	A
T_{OP}	Operating Temperature	-40 to 125	°C

Part Numbering



Description

The new WB07B0606LG-0 Wire Bond Zener Diode Die is for use in LED designs and sensitive elements that require bi-directional ESD protection. The WB07B0606LG-0 meets IEC 61000-4-2 contact discharge at 15 kV.

Features and Benefits

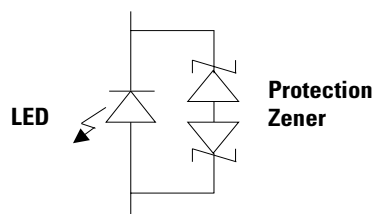
- Zener with bi-directional structure
- Paralleled to the LED
- Unity pad metal (for single wire bonding only)
- Two way zener diode protection
- ESD, ± 15 kV contact discharge per IEC 61000-4-2

Applications

- Handset Flash LED ESD protection
- Backlight LED in display TV and monitor
- Outdoor LED
- Ultraviolet UV light / Sterilamp
- Module embedded ESD die for I/Os

Functional Diagram

Equivalent Circuit



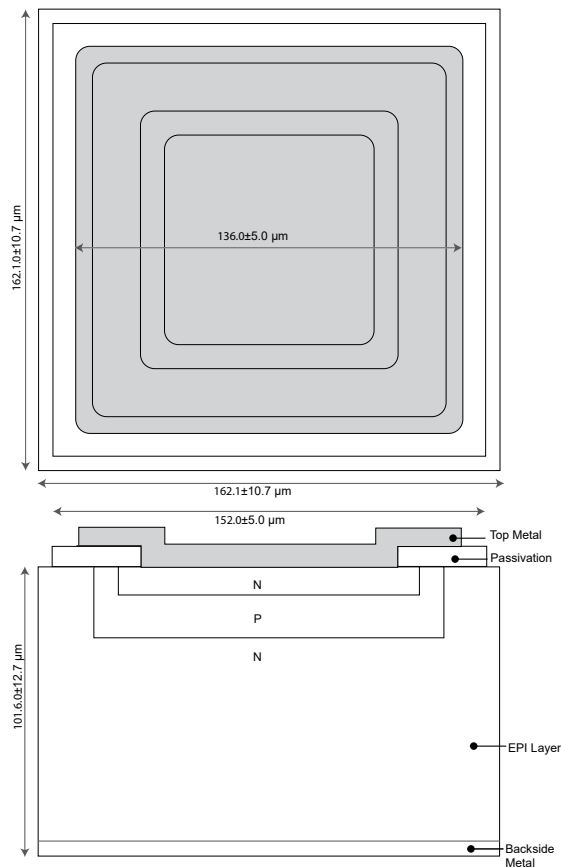
Electrical Characteristics ($T_{OP} = 25^\circ C$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Peak Pulse Current	I_{PP}	$t_p=8/20 \mu s$			3.0	A
Zener Voltage	V_z (Forward)	$I_{zf} = 5 \text{ mA}$	5.5		7.0	V
	V_z (Reverse)	$I_{zr} = 5 \text{ mA}$	5.3		6.8	V
Leakage Current	I_{df}	$V = 4 \text{ V}$		10	20	nA
	I_{dr}			10	20	nA

Note: 1. Parameter is guaranteed by package characterization

WB07B0606LG-0

Wire Bond Zener Diode Die, 7 V Bi-directional for ESD Protection

Physical Dimensions

Item	Characteristics	
Die size	$162.1 \pm 10.7 \mu\text{m}$	$6.38 \pm 0.42 \text{ mil}$
Pad size	$136.0 \pm 5.0 \mu\text{m}$	$5.35 \pm 0.20 \text{ mil}$
Die thickness	$101.6 \pm 12.7 \mu\text{m}$	$4.00 \pm 0.50 \text{ mil}$
Passivation	$152.0 \pm 5 \mu\text{m}$	$5.98 \pm 0.20 \text{ mil}$
Top metalization	Al/Cu	
Back metallization	TiW $0.6 \text{ k}\text{\AA}$, Au $4 \text{ k}\text{\AA}$	
DPW	956,951 pcs	
Yield	99.9% (Typical)	

Note:

1. For detail packing specification, please contact with Littelfuse
2. $\text{\AA} = 10^{-10} \text{ m}$

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