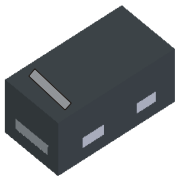
ULTRA-SMALL LEADLESS SURFACE MOUNT ZENER DIODE

Features

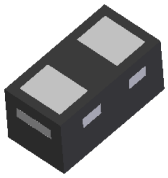
- Ultra-Small Leadless Surface Mount Package (0.6 x 0.3mm)
- Ultra-Low Profile Package (0.3mm)
- Ideally Suited for Automated Assembly Processes
- Low Leakage Current, Suitable for Battery-Powered Applications
- **Lead Free By Design/RoHS Compliant (Note 1)**
- **Halogen and Antimony Free "Green" Device (Notes 2 & 3)**
- **Qualified to AEC-Q101 Standards for High Reliability**

Mechanical Data

- Case: X3-DFN0603-2
- Case Material: Molded Plastic, “Green” Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminal Connections: Cathode Bar
- Terminals: Finish – Matte Tin over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Weight: 0.2 mg (Approximate)



Top View



Bottom View

Ordering Information (Note 4)

Part Number	Case	Packaging
GDZ8V2BLP3-7	X3-DFN0603-2	10,000/Tape & Reel

Notes:
1. Fully EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. No purposely added lead. Halogen and Antimony free
2. Halogen and Antimony free "Green” products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
3. Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com.
4. For packaging details, go to our website at http://www.diodes.com.

Marking Information



xx = Product Marking Code
(See Electrical Characteristics Table)
Line Denotes Cathode Side

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Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5) T_A = 25°C	P_D	250	mW
Thermal Resistance, Junction to Ambient Air (Note 5) T_A = 25°C	$R_{\theta JA}$	500	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Electrical Characteristics @T_A = 25°C unless otherwise specified

Type Number	Marking Code	Zener Voltage Range (Note 6)				Maximum Reverse Current (Note 6)	
		V_Z @ I_{ZT}			I_{ZT}	I_R	@ V_R
		Nom (V)	Min (V)	Max (V)	mA	µA	V
GDZ8V2BLP3	KI, KR	8.2	7.995	8.405	5	0.5	5.0

Notes: 5. Device mounted on FR-4 PCB with minimum recommended pad layout, as shown in Diodes Incorporated's Suggested Pad Layout document, which can be found on our website at http://www.diodes.com.
6. Short duration pulse test used to minimize self-heating effect.

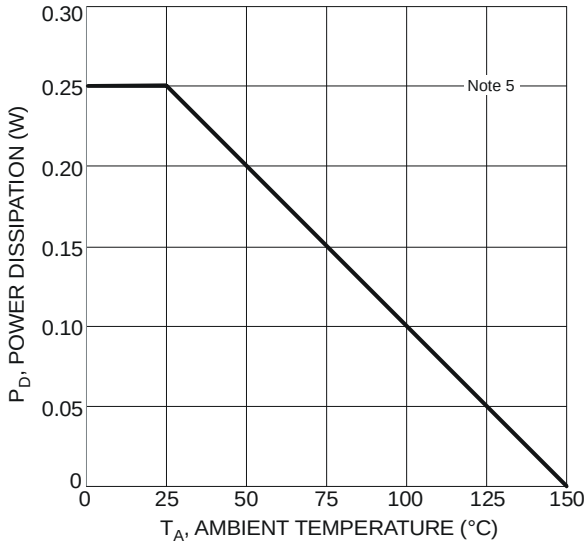


Fig. 1 Power Derating Curve

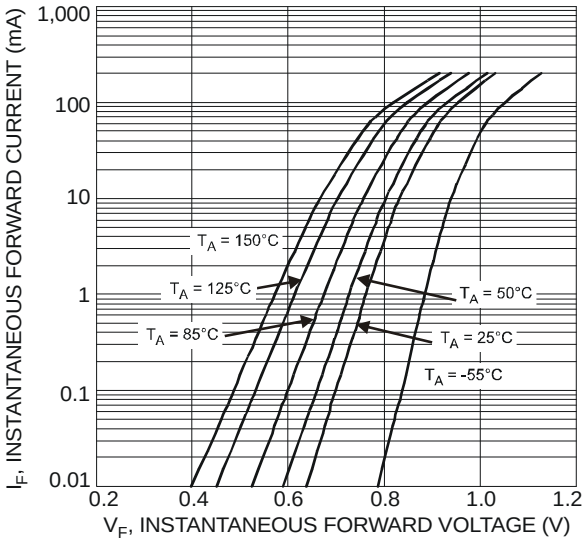


Fig. 2 Typical Forward Characteristics

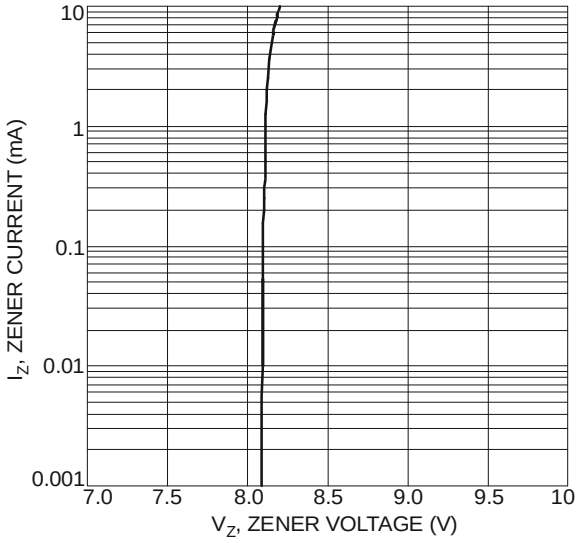


Fig. 3 Typical Zener Breakdown Characteristics

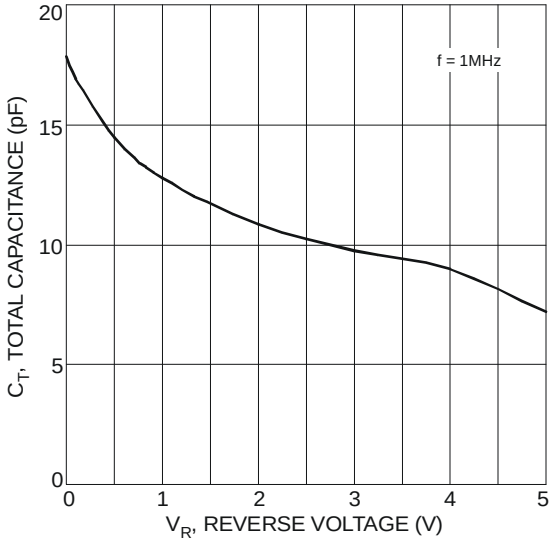
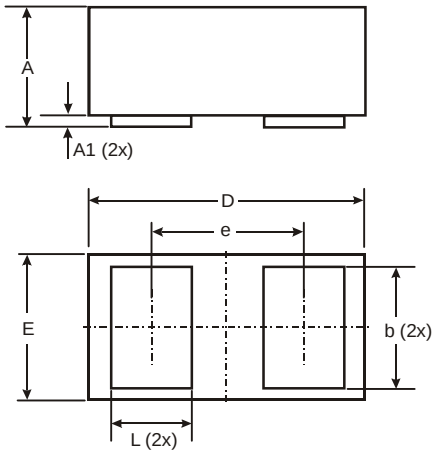


Fig. 4 Typical Total Capacitance

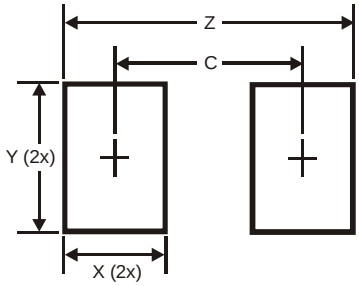
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Package Outline Dimensions



X3-DFN0603-2			
Dim	**Min**	**Max**	**Typ**
A	0.27	0.35	0.30
A1	0.00	0.03	0.02
b	0.19	0.29	0.24
D	0.595	0.645	0.62
E	0.295	0.345	0.32
e	-	-	0.355
L	0.14	0.24	0.19
All Dimensions in mm			

Suggested Pad Layout



Dimensions	Value (in mm)
C	0.355
X	0.230
Y	0.300
Z	0.610

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