



# BZT52-B5V1FN2-AU~BZT52-B5V6FN2-AU

## SURFACE MOUNT SILICON ZENER DIODES

<b>VOLTAGE</b>	<b>5.1~5.6 Volt</b>	<b>POWER</b>	<b>250 mWatt</b>
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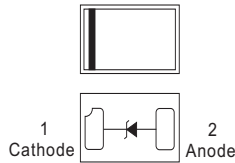
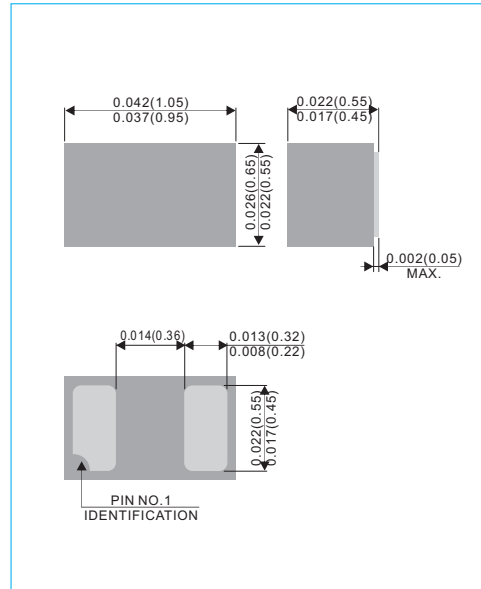
**DFN 2L** Unit : inch(mm)

### FEATURES

- Planar Die construction
- 250mW Power Dissipation
- Zener Voltages from 5.1-5.6V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)
- AEC-Q101 qualified

### MECHANICAL DATA

- Case: DFN-2L, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0011 grams , 0.00004 ounces
- Polarity:Color band denotes cathode end



### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Power Dissipation	P <sub>D</sub>	250	mW
Thermal resistance Junction to Ambient ( Note 1)	R <sub>θJA</sub>	500	°C/W
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub>	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>ZT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ V <sub>R</sub>		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
250 mWatts Zener Diodes										
BZT52-B5V1FN2-AU	5.1	5.00	5.20	60	5.0	480	1.00	2	2	W9
BZT52-B5V6FN2-AU	5.6	5.49	5.71	40	5.0	400	1.00	1	2	WA

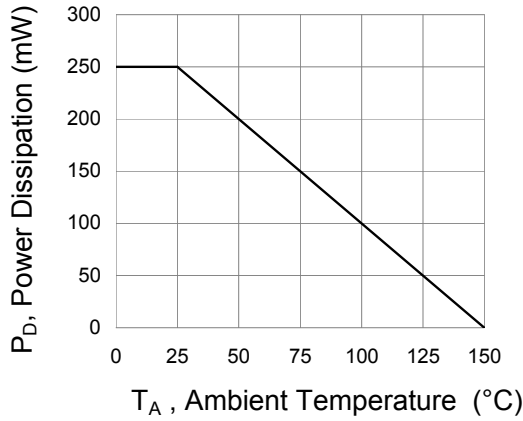
#### NOTES:

1. Mounted on minimum pad layout .

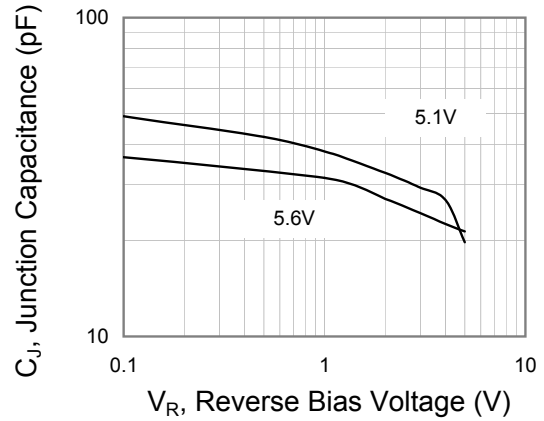


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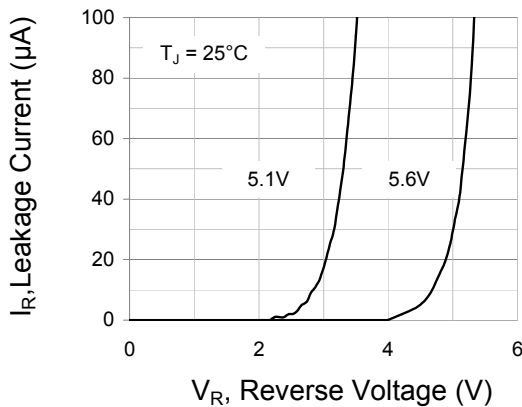
## RATING AND CHARACTERISTIC CURVES



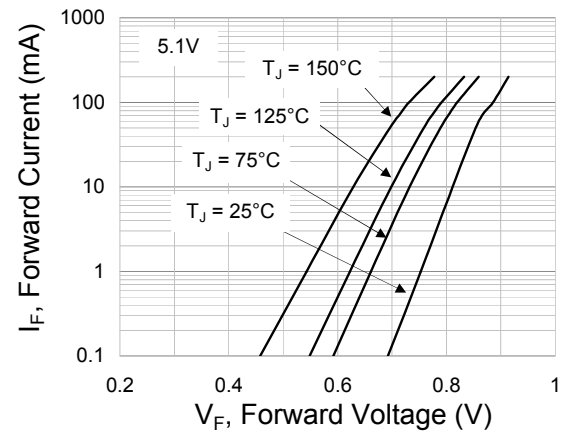
**Fig.1 Steady-State Power Derating Curve**



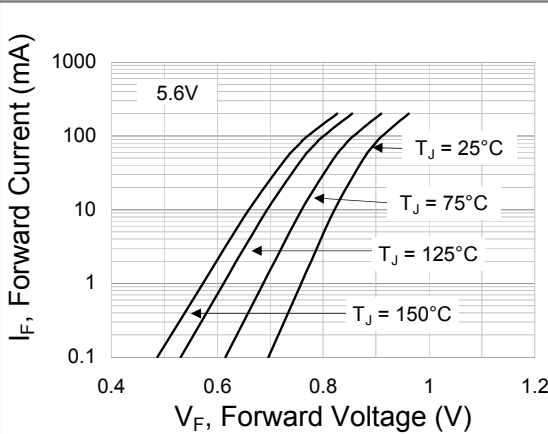
**Fig.2 Typical Junction Capacitance**



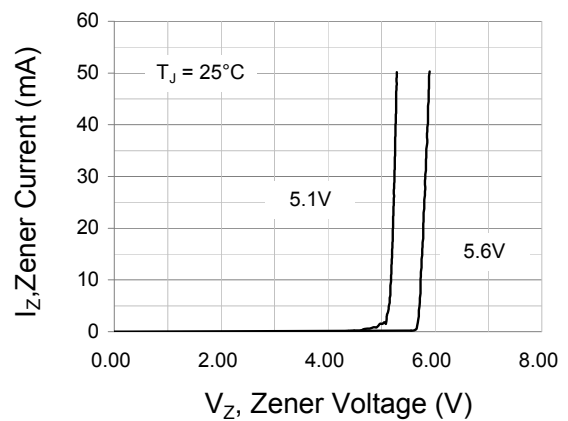
**Fig.3 Typical Leakage Characteristics**



**Fig.4 Typical Forward Characteristics**



**Fig.5 Typical Forward Characteristics**

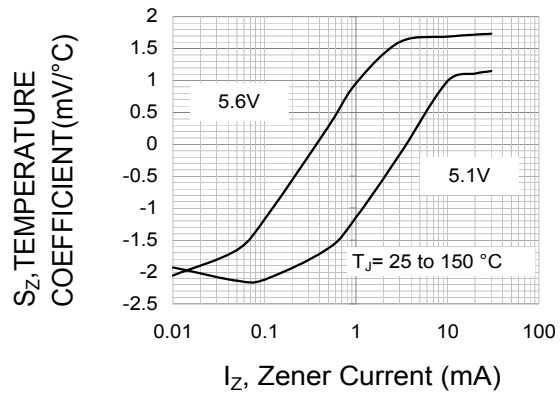


**Fig.6 Typical Zener Characteristics**



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### RATING AND CHARACTERISTIC CURVES



**Fig.7** Temperature coefficient as a function of working current; typical values.

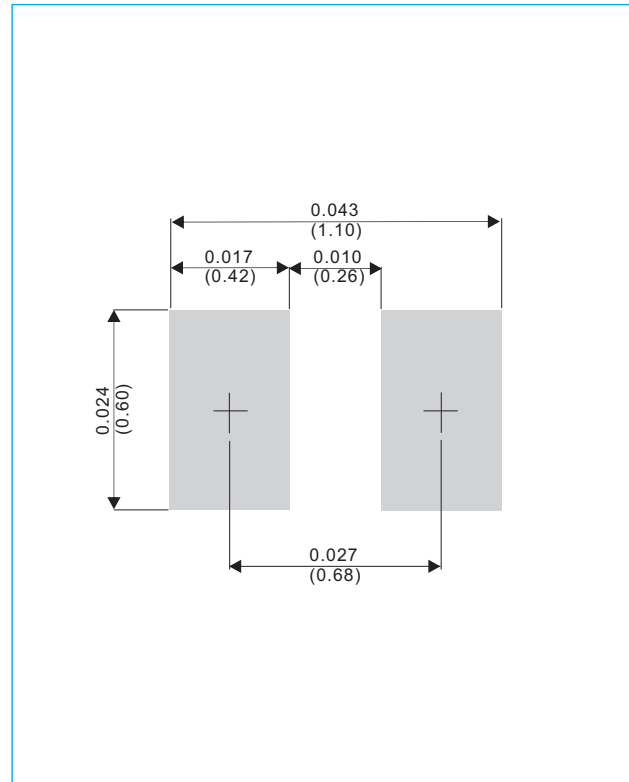


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### MOUNTING PAD LAYOUT

DFN 2L

Unit : inch(mm)



### ORDER INFORMATION

- Packing information  
T/R - 8K per 7" plastic Reel

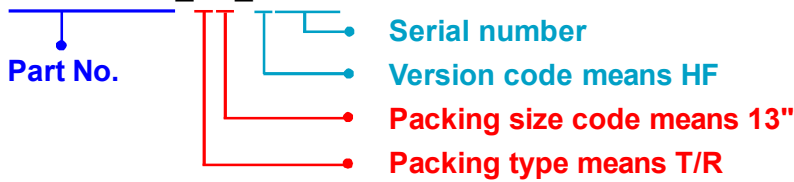


## BZT52-B5V1FN2-AU~BZT52-B5V6FN2-AU

Part No\_packing code\_Version  
BZT52-B5V1FN2-AU\_R1\_000A1

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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