



BZT52-C5V1FN2B SERIES

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE	5.1-6.8 Volt	POWER	250mWatt
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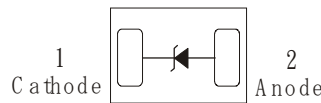
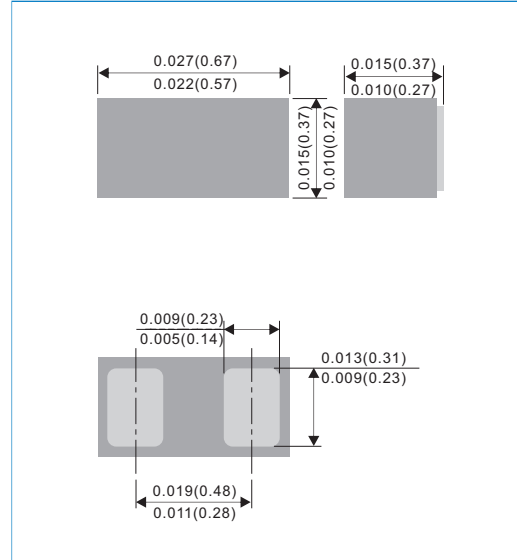
DFN0603 Unit : inch(mm)

FEATURES

- Planar Die construction
- 250mW Power Dissipation
- Zener Voltages from 5.1~6.8V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2.0

MECHANICAL DATA

- Case: DFN0603, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00001 ounces, 0.00028grams
- Polarity: Color band denotes cathode end



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Power Dissipation	P _D	250	mW
Thermal resistance Junction to Ambient (Note 1)	R _{θJA}	500	°C/W
Operating Junction Temperature and Storage Temperature Range	T _J	-55 to +150	°C

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{zT} @ I _{ZT}		Z _{zK} @ I _{ZK}		I _R @ V _R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
250 mWatts Zener Diodes										
BZT52-C5V1FN2B	5.1	4.84	5.37	60	5.0	400	1.00	0.8	2	9
BZT52-C6V8FN2B	6.8	6.47	7.14	8	5.0	80	1.00	0.1	3	C

NOTES:

1. Mounted on 48 cm² FR-4 PCB board.



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RATING AND CHARACTERISTIC CURVES

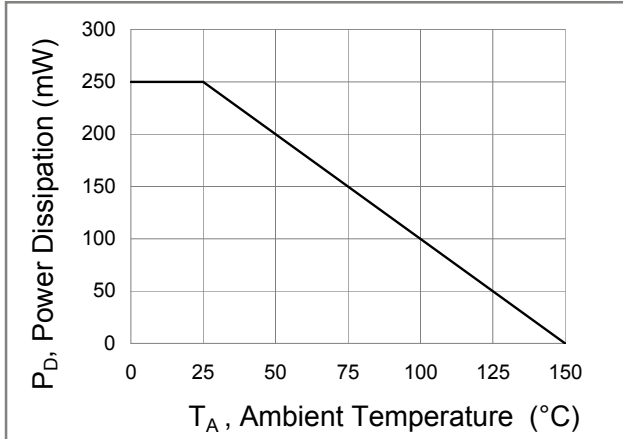


Fig.1 Power Derating Curve

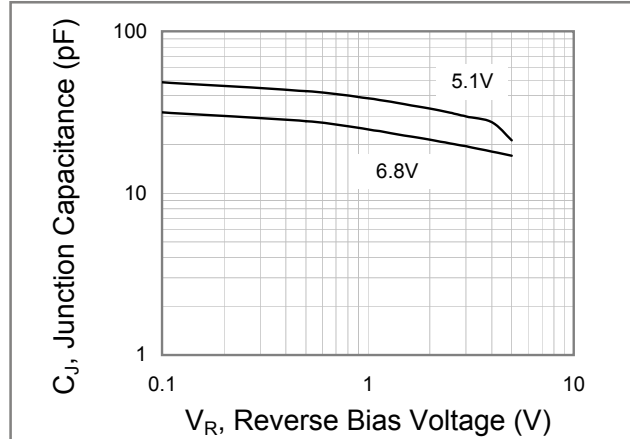


Fig.2 Typical Junction Capacitance

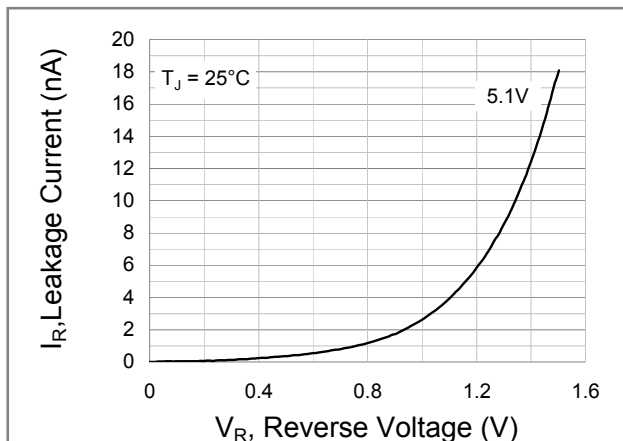


Fig.3 Typical Leakage Characteristics

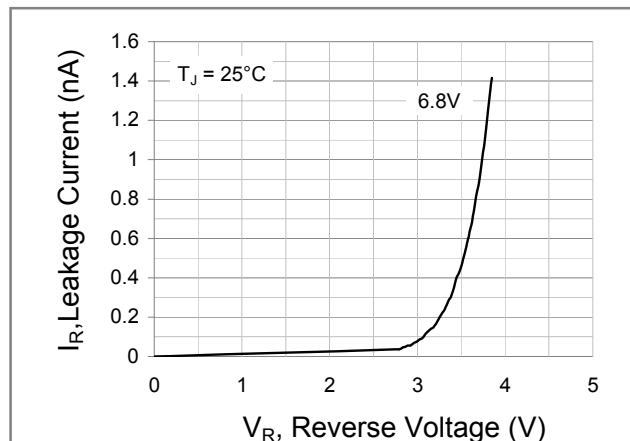


Fig.4 Typical Leakage Characteristics

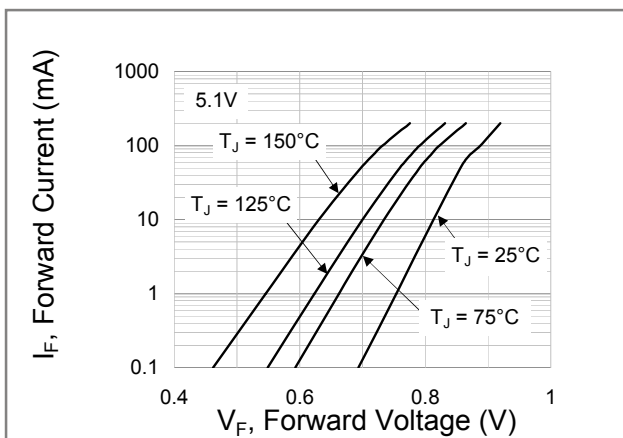


Fig.5 Typical Forward Characteristics

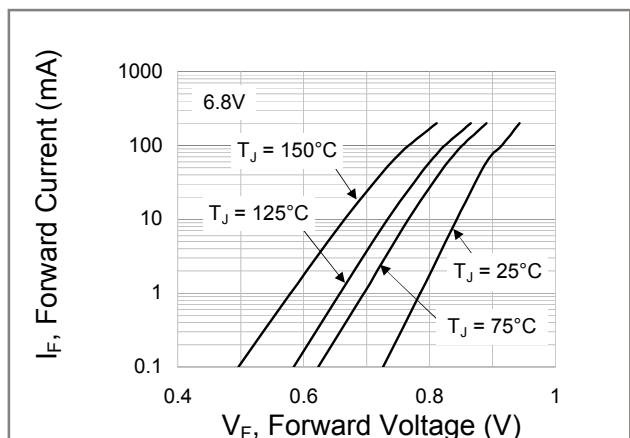


Fig.6 Typical Forward Characteristics



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RATING AND CHARACTERISTIC CURVES

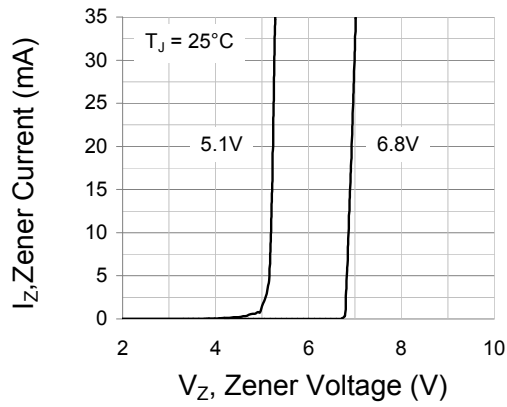


Fig.7 Typical Zener Characteristics

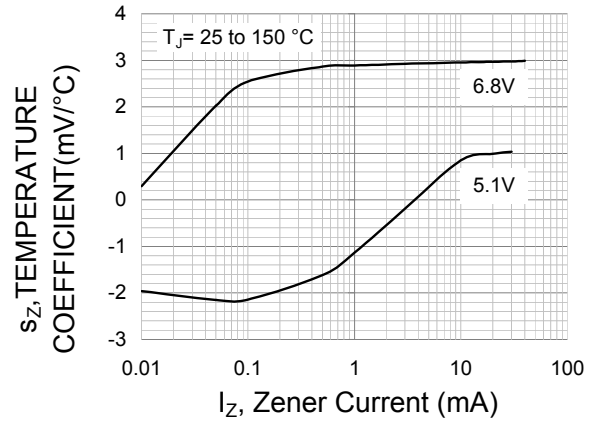
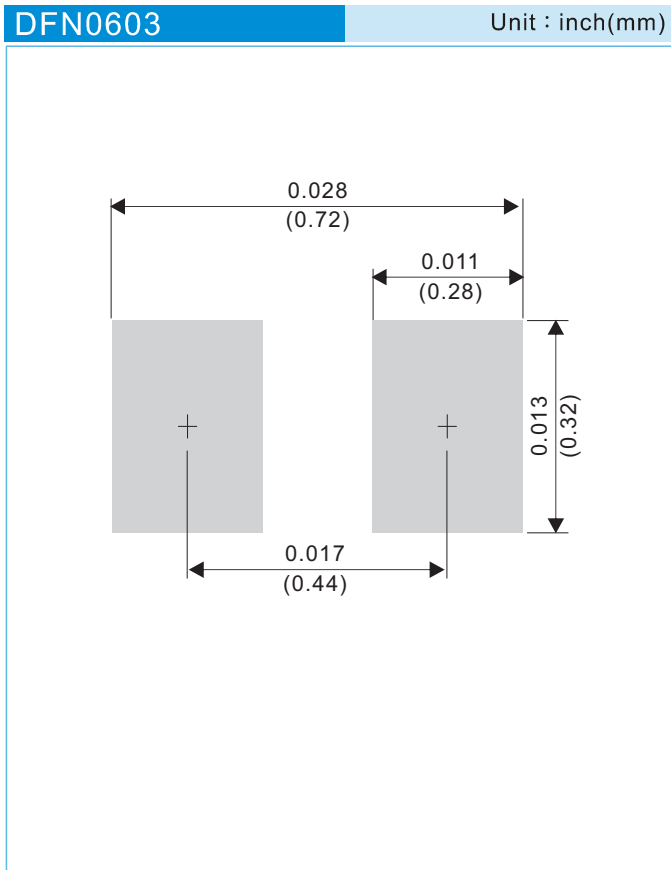


Fig.8 Temperature coefficient as a function of working current; typical values.



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 10K per 7" plastic Reel



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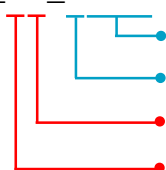
Part No_packing code_Version

BZT52-C5V1FN2B_R1_00001

For example :

RB500V-40_R2_00001

Part No.



Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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



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