

Zener Diodes

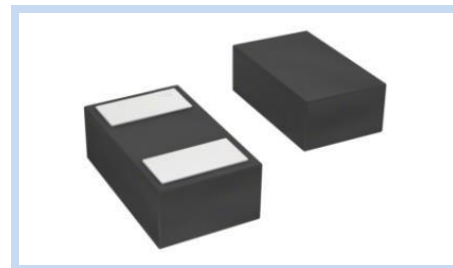
0201 DFN0603

BZT52C-D01 Series

MERITEK

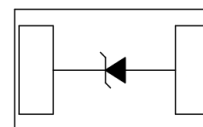
FEATURE

- Zener Voltage Range: 5.1V and 6.8V
- Power Dissipation: 250mW
- Silicon Planar Zener Diode in Compact Construction Design
- Ideally Suited for Automated Assembly Processes



MECHANICAL DATA

- Case: 0201/DFN0603, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Band Marking Denotes Cathode End



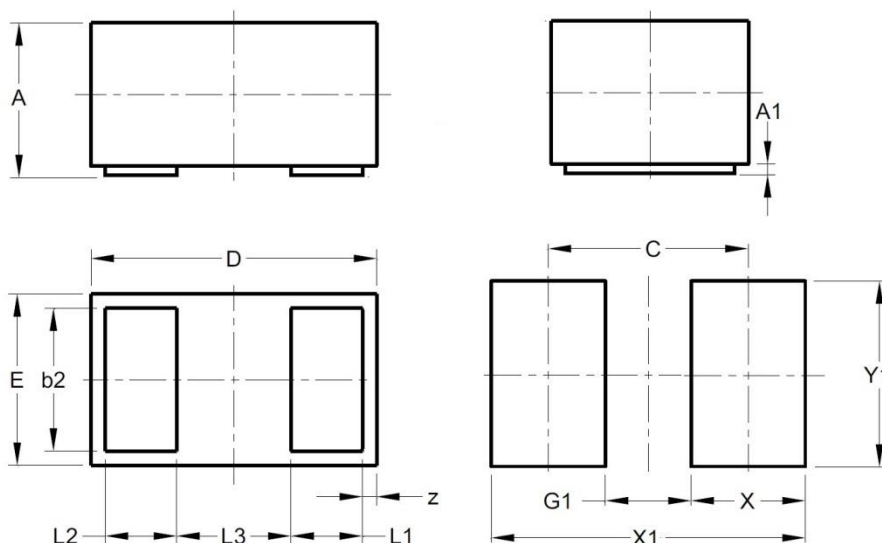
MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	P_D	250	mW
Resistance Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}C/W$
Junction Temperature	T_J	-55~+150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}C$

Note: $T_A = 25^{\circ}C$ unless otherwise noted

DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.27	0.37
A1	-	-
b2	0.23	0.31
D	0.57	0.67
E	0.27	0.37
z	0.10	0.10
L1	0.14	0.23
L2	0.14	0.23
L3	0.24	0.24
C	0.40	0.40
G1	0.16	0.16
X	0.24	0.24
X1	0.64	0.64
Y1	0.34	0.34



ELECTRICAL CHARACTERISTICS

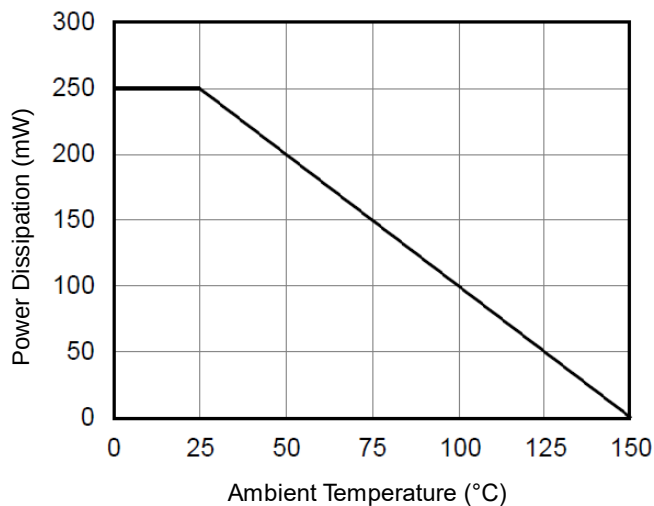
Part Number	Nominal Zener Voltage V_Z at I_{ZT}			Max Zener Impedance Z_{ZT} at I_{ZT} , Z_{ZK} at $I_{ZK}=1mA$			Reverse Leakage Current I_R at V_R	
	Nom	Min	Max	I_{ZT}	Z_{ZT}	Z_{ZK}	I_R max	V_R
	(V)	(V)	(V)	(mA)	(Ω)	(Ω)	(μA)	(V)
BZT52C5V1FD01	5.1	4.84	5.37	5	60	400	0.8	2
BZT52C6V8FD01	6.8	6.47	7.14	5	8	80	0.1	3

Note:

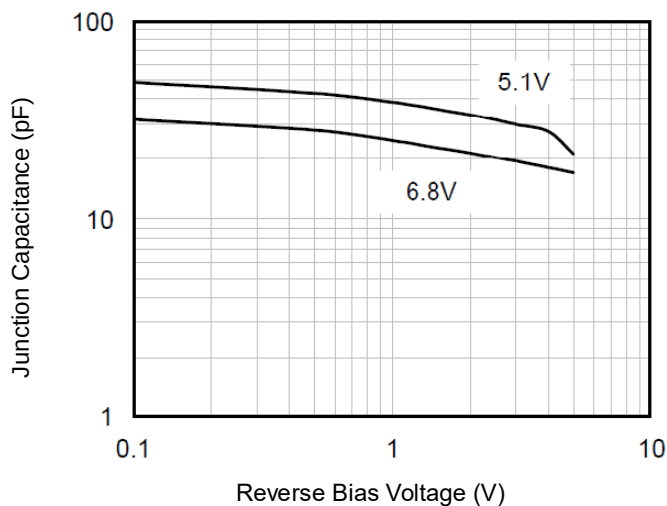
1. $T_A = 25^\circ C$ unless otherwise noted
2. Mounted on 48cm² FR-4 PCB board.

CHARACTERISTIC CURVES

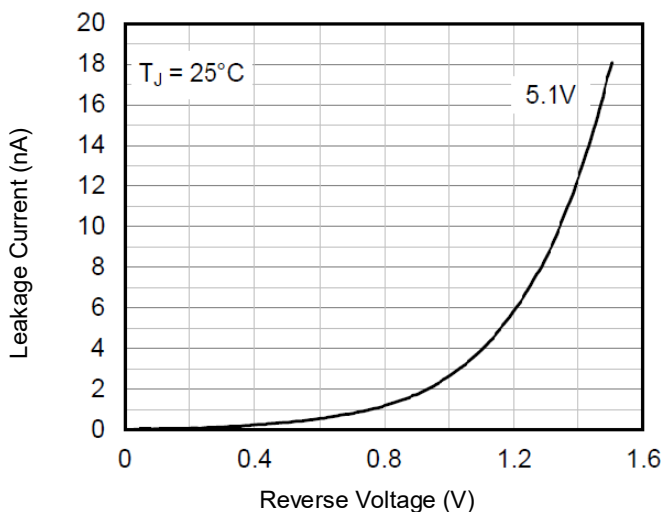
Power Derating



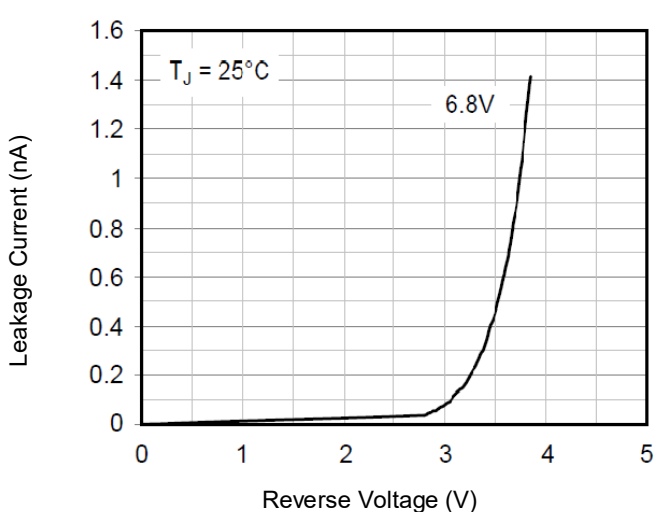
Typical Junction Capacitance



Typical Leakage Characteristics

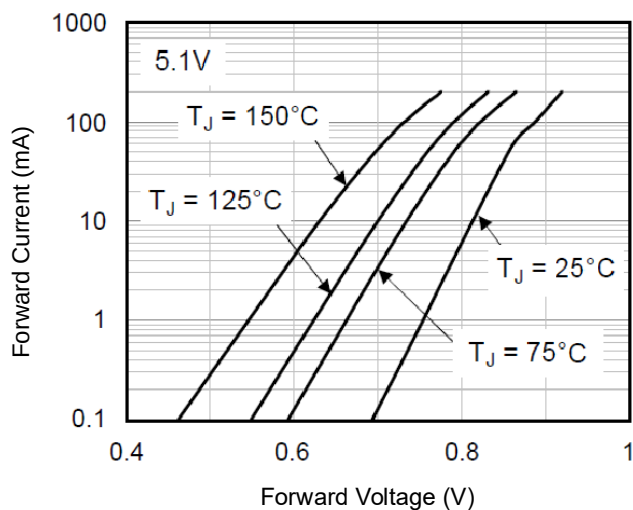


Typical Leakage Characteristics

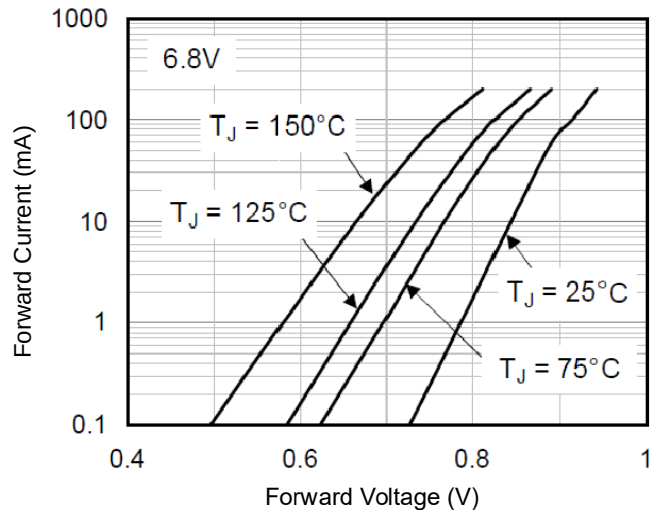


CHARACTERISTIC CURVES

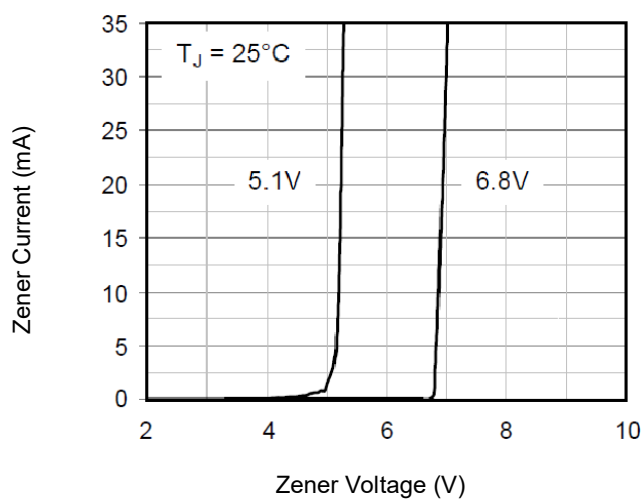
Typical Forward Characteristics



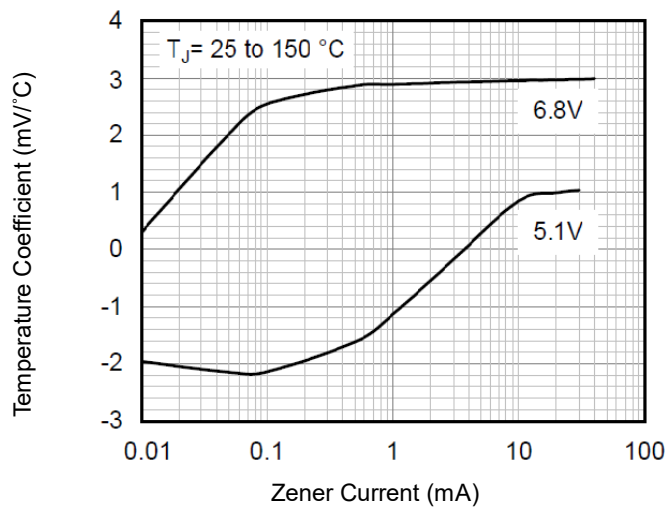
Typical Forward Characteristics



Typical Zener Characteristics



Typical Temperature Coefficient



*Specifications subject to change without notice.