

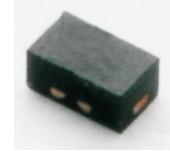
## CZRZ3V3B-HF Thru. CZRZ6V8B-HF

Voltage: 3.3 to 6.8 Volts

Power: 100mW

RoHS Device

Halogen Free



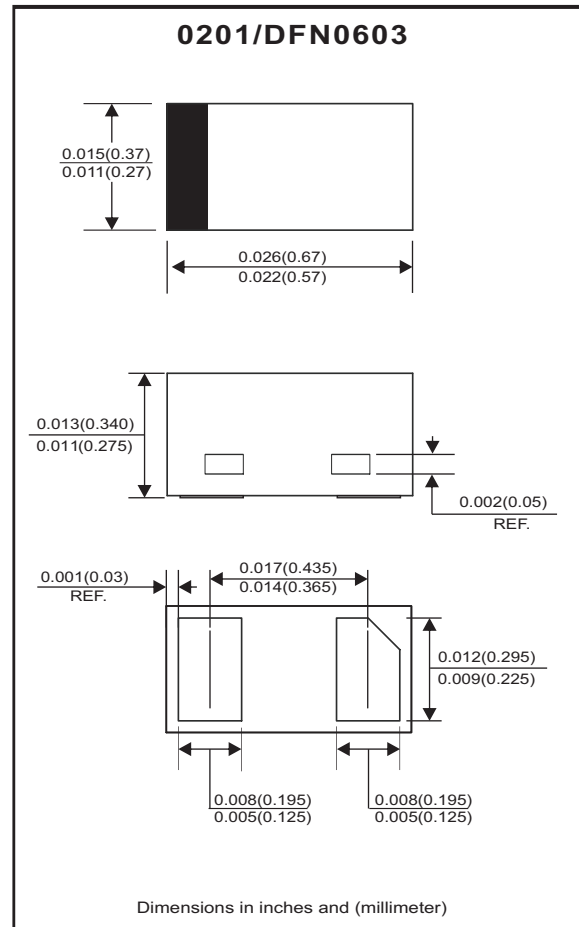
### Features

- 100mW Power Dissipation.
- Voltages : 3.3V, 4.7V, 5.1V, 5.6V, 6.8V
- High reliability.
- Designed for mounting on small surface.
- Extremely thin/leadless package.

### Mechanical data

- Case: 0201/DFN0603 package, molded plastic.
- Terminals: Gold plated, Solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Mounting position: Any

### Circuit diagram



### Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Forward Voltage Drop at $I_F = 10 \text{ mA}$	$V_F$	0.9	V
Maximum Power Dissipation at 25 °C	$P_D$	100	mW
Junction Temperature	$T_J$	150	°C
Operating Temperature Range	$T_{opr}$	-55 to +125	°C
Storage Temperature Range	$T_{stg}$	-55 to +150	°C

## Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ unless otherwise specified )

Part Number	Zener Voltage				Operating resistance		Rising Operating Resistance		Leakage Current	
	$V_Z$ (Volts)			@ $I_{ZT}$	$Z_{ZT}$ (Ohm)		$Z_{ZK}$ (Ohm)		$I_R@V_R$	
	Min	Nom	Max	mA	Max	$I_{ZT}$ (mA)	Max	$I_{ZK}$ (mA)	$\mu\text{A}$	Volts
CZRZ3V3B-HF	3.16	3.30	3.53	5	100	5	1000	1.0	20	1.0
CZRZ4V7B-HF	4.42	4.70	4.90	5	100	5	800	0.5	2.0	1.0
CZRZ5V1B-HF	4.84	5.10	5.37	5	80	5	500	0.5	2.0	1.5
CZRZ5V6B-HF	5.31	5.60	5.92	5	60	5	200	0.5	1.0	2.5
CZRZ6V8B-HF	6.47	6.80	7.14	5	40	5	60	0.5	0.5	3.5

## RATING AND CHARACTERISTIC CURVES

Fig.1 - Forward Characteristics

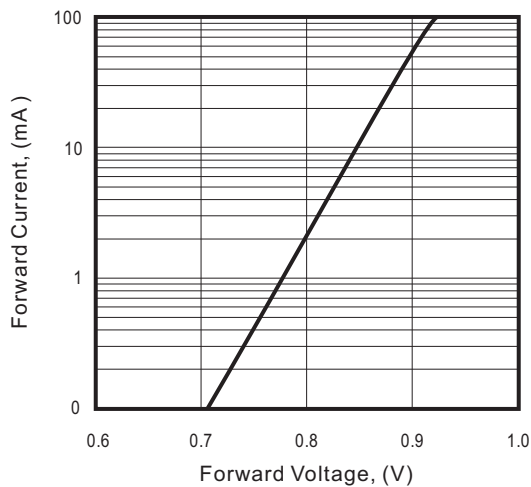


Fig.2 - Zener Breakdown Characteristics

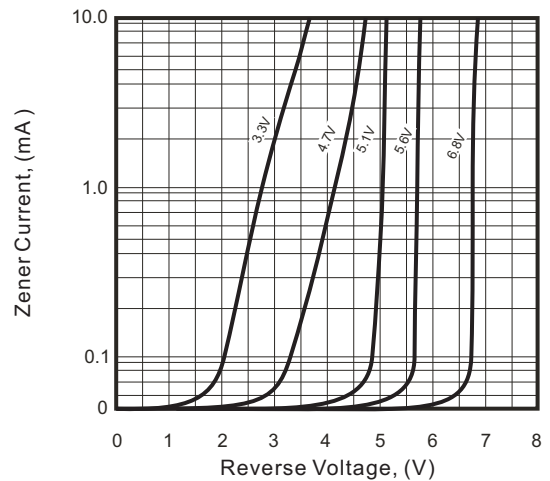
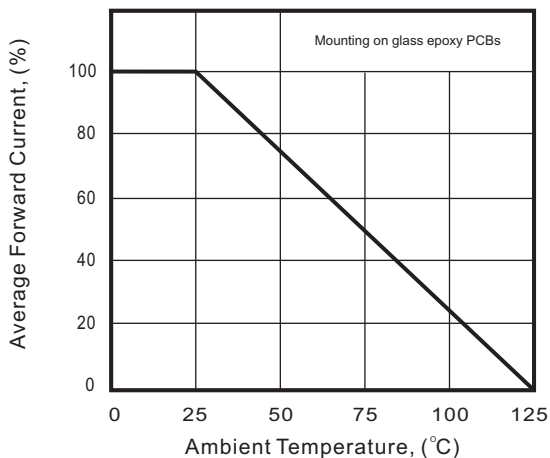
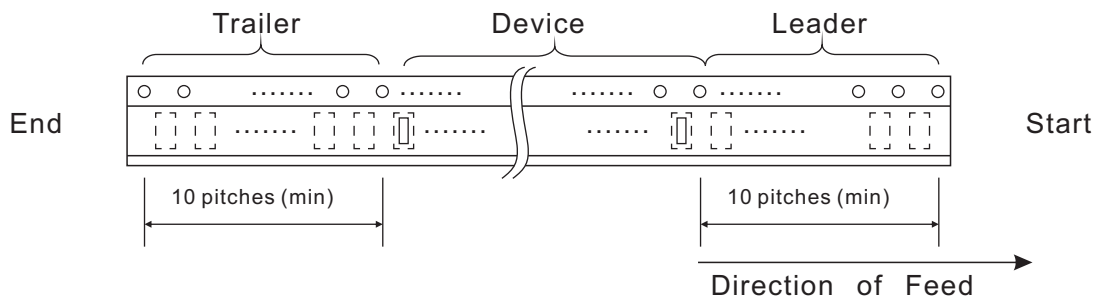
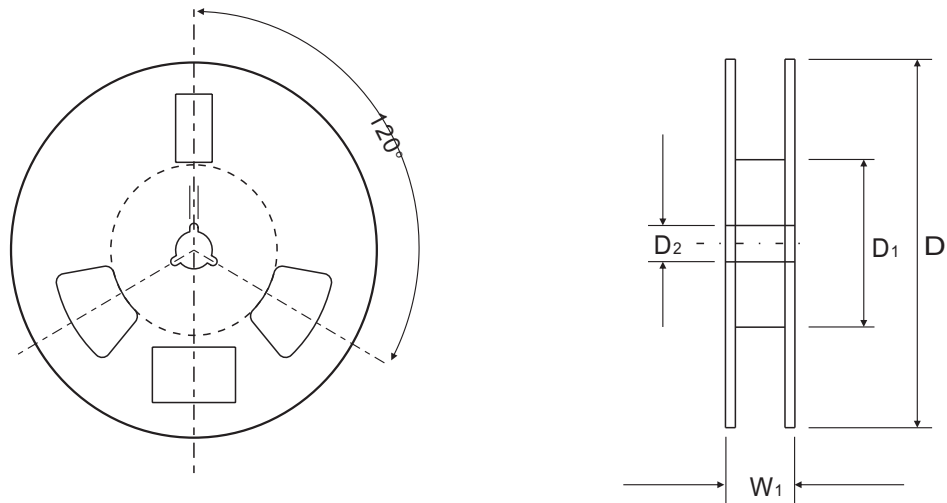
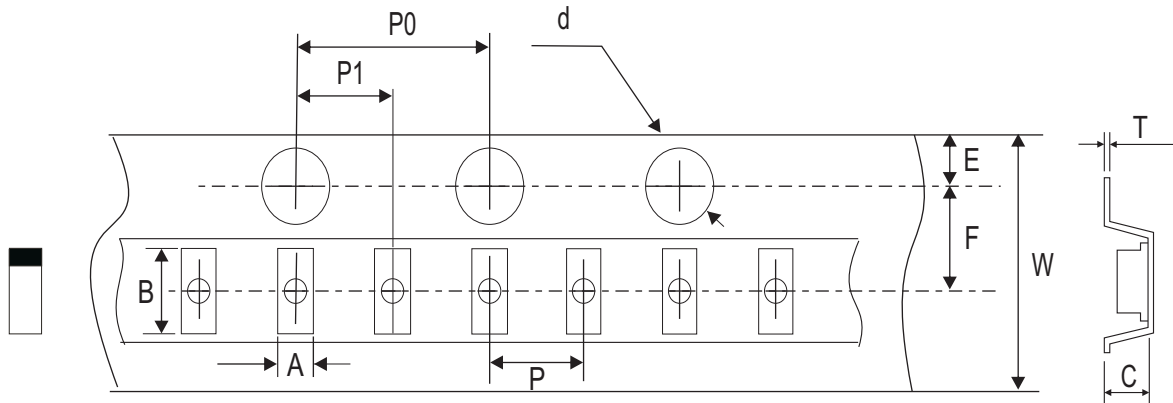


Fig.3 - Current Derating Curve



## Reel Taping Specification



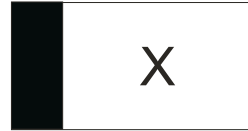
0201 (DFN0603)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	0.39 +0.03/-0.02	0.72 ± 0.03	0.36 ± 0.03	1.50 + 0.10	178 ± 1.00	54.4 ± 0.40	13.0 ± 0.20
	(inch)	0.015 +0.001/0.001	0.028 ± 0.001	0.014 ± 0.001	0.059 + 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

0201 (DFN0603)	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.05	2.00 ± 0.05	0.23 ± 0.05	8.00 ± 0.10	12.30 ± 0.10
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.002	0.315 ± 0.008	0.484 ± 0.004

# SMD Zener Diode

## Marking Code

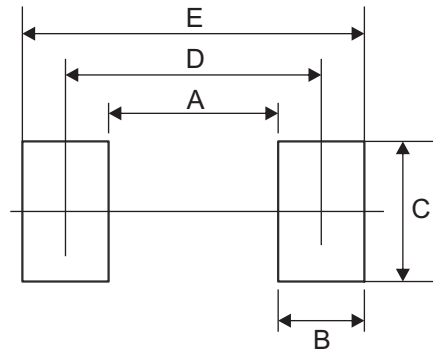
Part Number	Marking Code
CZRZ3V3B-HF	E
CZRZ4V7B-HF	I
CZRZ5V1B-HF	J
CZRZ5V6B-HF	K
CZRZ6V8B-HF	L



X = Product type marking code

## Suggested PAD Layout

SIZE	0201(DFN0603)	
	(mm)	(inch)
A	0.16	0.006
B	0.24	0.009
C	0.34	0.013
D	0.40	0.016
E	0.64	0.025



## Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
0201/DFN0603	10,000	7