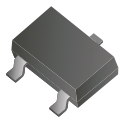
# CZRT23C2V7-G Thru. CZRT23C39-G

## Zener Voltage: 2.7V to 39V
## Power Dissipation: 300mW
## RoHS Device



## Features

-Dual Zeners in common anode configuration.

-300mW power dissipation rating.

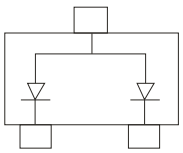
-Ideally suited for automatic insertion.

-ΔVZ for both diodes in one case is <=5%.

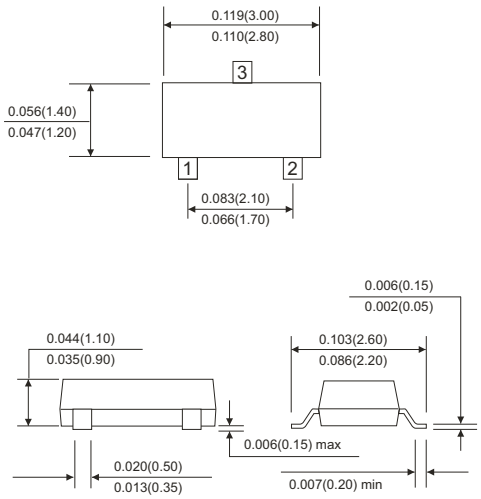
## Mechanical Data

-Case: SOT-23 mold plastic

## Diagram



**SOT-23**




Dimensions in inches and (millimeter)

## Maximum Ratings (at Ta=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Power dissipation | $P_D$ | 300 | mW |
| Thermal Resistance, junction to ambient | $R_{\theta JA}$ | 417 | °C/W |
| Operating junction temperature | $T_J$ | -65 ~ +150 | °C |
| Storage temperature | $T_{STG}$ | -65 ~ +150 | °C |



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## ELECTRICAL CHARACTERISTIC (CZRT23C2V7-G Thru. CZRT23C39-G)

| Type | Marking Code | Zener voltage range (1) | Maximum Zener impedance (2) | | Typical temperature coefficient | Min. reverse voltage (1) |
|---|---|---|---|---|---|---|
| | | @$I_{ZT}$=5.0mA | @$I_{ZT}$=5.0mA | @$I_{ZK}$=1.0mA | | @$I_R$=0.1μA |
| | | $V_Z$(V) | $Z_{ZT}$(Ω) | $Z_{ZK}$(Ω) | $T_C$(%/ °C) | $V_R$(V) |
| CZRT23C2V7-G | KD1 | 2.5~2.9 | 83 | 500 | -0.065 | --- |
| CZRT23C3V0-G | KD2 | 2.8~3.2 | 95 | 500 | -0.060 | --- |
| CZRT23C3V3-G | KD3 | 3.1~3.5 | 95 | 500 | -0.055 | --- |
| CZRT23C3V6-G | KD4 | 3.4~3.8 | 95 | 500 | -0.055 | --- |
| CZRT23C3V9-G | KD5 | 3.7~4.1 | 95 | 500 | -0.050 | --- |
| CZRT23C4V3-G | KD6 | 4.0~4.6 | 95 | 500 | -0.035 | --- |
| CZRT23C4V7-G | KD7 | 4.4~5.0 | 78 | 500 | -0.015 | --- |
| CZRT23C5V1-G | KD8 | 4.8~5.4 | 60 | 480 | 0.005 | 0.8 |
| CZRT23C5V6-G | KD9 | 5.2~6.0 | 40 | 400 | 0.020 | 1.0 |
| CZRT23C6V2-G | KDA | 5.8~6.6 | 10 | 200 | 0.030 | 2.0 |
| CZRT23C6V8-G | KDB | 6.4~7.2 | 8 | 150 | 0.045 | 3.0 |
| CZRT23C7V5-G | KDC | 7.0~7.9 | 7 | 50 | 0.050 | 5.0 |
| CZRT23C8V2-G | KDD | 7.7~8.7 | 7 | 50 | 0.055 | 6.0 |
| CZRT23C9V1-G | KDE | 8.5~9.6 | 10 | 50 | 0.065 | 7.0 |
| CZRT23C10-G | KDF | 9.4~10.6 | 15 | 70 | 0.065 | 7.5 |
| CZRT23C11-G | KDG | 10.4~11.6 | 20 | 70 | 0.070 | 8.5 |
| CZRT23C12-G | KDH | 11.4~12.7 | 20 | 90 | 0.080 | 9.0 |
| CZRT23C13-G | KDI | 12.4~14.1 | 25 | 110 | 0.080 | 10.0 |
| CZRT23C15-G | KDJ | 13.8~15.6 | 30 | 110 | 0.090 | 11.0 |
| CZRT23C16-G | KDK | 15.8~17.1 | 40 | 170 | 0.090 | 12.0 |
| CZRT23C18-G | KDL | 16.8~19.1 | 50 | 170 | 0.090 | 14.0 |
| CZRT23C20-G | KDM | 18.8~21.2 | 50 | 220 | 0.090 | 15.0 |
| CZRT23C22-G | KDN | 20.8~23.3 | 55 | 220 | 0.090 | 17.0 |
| CZRT23C24-G | KDO | 22.8~25.6 | 80 | 220 | 0.090 | 18.0 |
| CZRT23C27-G | KDP | 25.1~28.9 | 80 | 250 | 0.090 | 20.0 |
| CZRT23C30-G | KDQ | 28~32 | 80 | 250 | 0.090 | 22.5 |
| CZRT23C33-G | KDR | 31~35 | 80 | 250 | 0.090 | 25.0 |
| CZRT23C36-G | KDS | 34~38 | 90 | 250 | 0.090 | 27.0 |
| CZRT23C39-G | KDT | 37~41 | 90 | 300 | 0.110 | 29.0 |

NOTES:
(1) Short duration test pulse used to minimize self-heating effect.
(2) f=1KHz



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## RATINGS and CHARACTERISTIC CURVE (CZRT23C2V7-G Thru. CZRT23C39-G)

Fig.1 Power Derating Curve

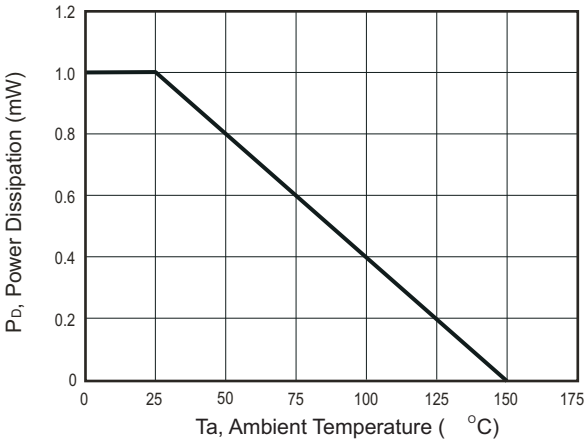



Fig.2 Zener Breakdown Characteristics

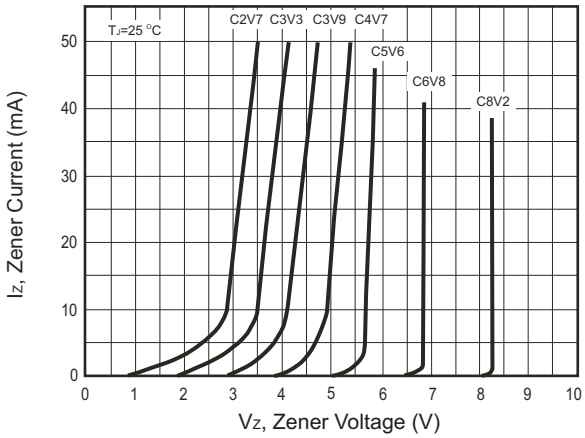
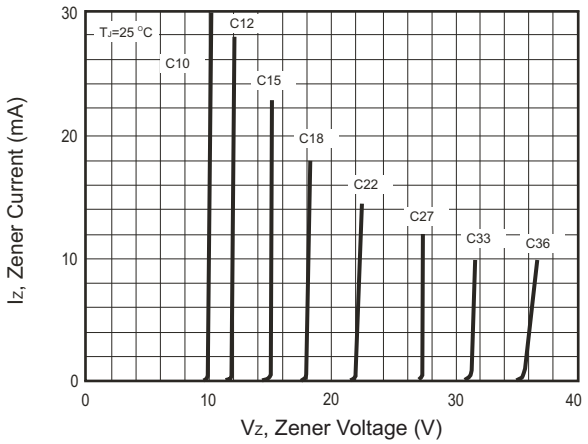



Fig.3 Zener Breakdown Characteristics






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