

# CZRT23C2V7-G Thru. CZRT23C39-G

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



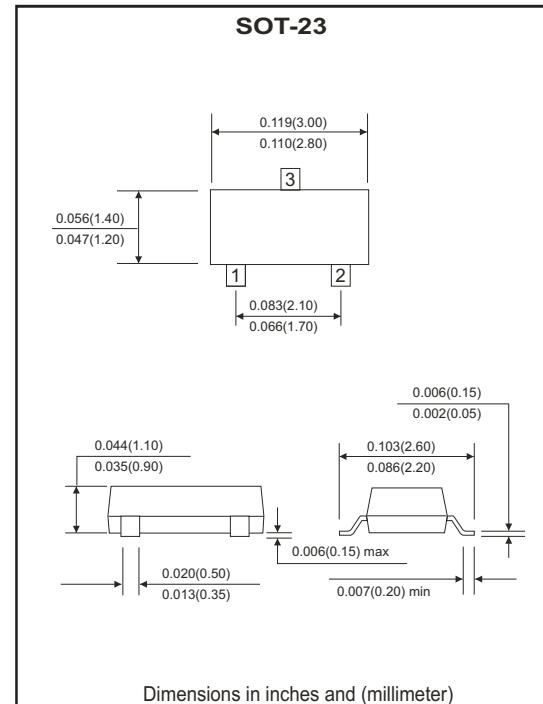
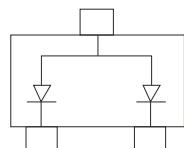
## Features

- Dual Zeners in common anode configuration.
- 300mW power dissipation rating.
- Ideally suited for automatic insertion.
- $\Delta V_Z$  for both diodes in one case is  $\leq 5\%$ .

## Mechanical Data

-Case: SOT-23 mold plastic

## Diagram



## Maximum Ratings (at $T_a=25^\circ C$ unless otherwise noted)

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

# SMD Zener Diode

**Comchip**  
SMD Diode Specialist

## 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 <sub>R</sub> =0.1μA
		@I <sub>ZT</sub> =5.0mA	@I <sub>ZT</sub> =5.0mA	@I <sub>ZK</sub> =1.0mA			
		V <sub>Z</sub> (V)	Z <sub>ZT</sub> (Ω)	Z <sub>ZK</sub> (Ω)	T <sub>C</sub> (%/ °C)	V <sub>R</sub> (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

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

Fig.1 Power Derating Curve

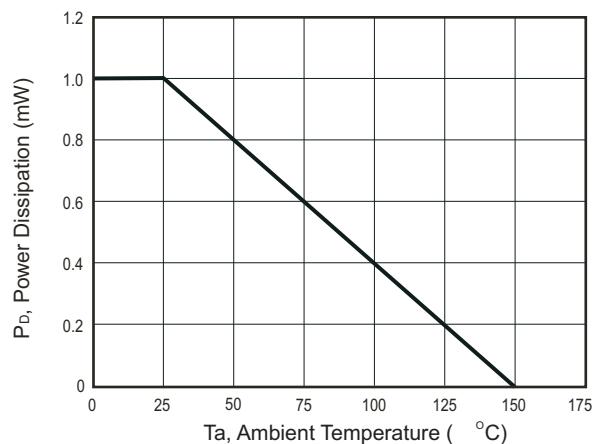


Fig.2 Zener Breakdown Characteristics

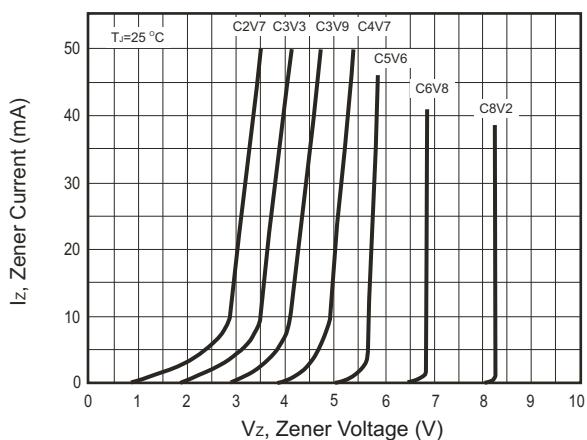


Fig.3 Zener Breakdown Characteristics

