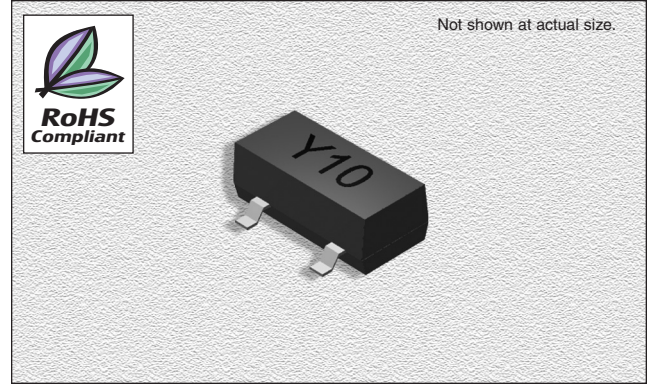


## CTZ84C Series 2.4V ~ 39V

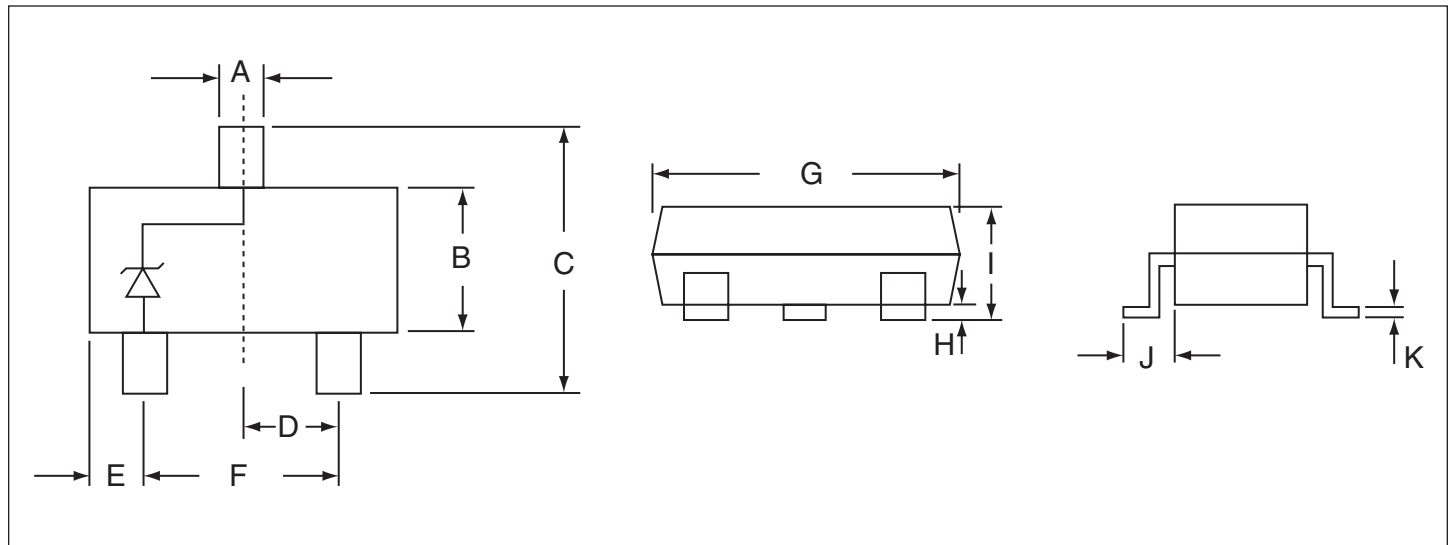


### CHARACTERISTICS

**Description:** SOT-23 Plastic-Encapsulated Zener Diode  
**Features:** Planar Die Construction. 350mW Power Dissipation. Zener Voltages from 2.4V ~ 39V. Ideally Suited for Automated Assembly Process.  
**Packaging:** Tape & Reel  
**Miscellaneous:** **RoHS Compliant**  
**Additional Information:** Additional electrical & physical information available upon request  
**Samples available. See website for ordering information.**

### PHYSICAL DIMENSIONS (mm)

Size	A	B	C	D	E	F	G	H	I	J	K
<b>Min.</b>	0.37	1.19	2.10	0.89	0.45	1.78	2.65	0.013	0.89	0.45	0.076
<b>Max.</b>	0.51	1.40	2.50	1.05	0.61	2.05	3.05	0.015	1.10	0.61	0.178



### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristics	Symbol	Value	Unit
Forward Voltage @ $I_F = 10\text{mA}$	$V_F$	0.9	V
Power Dissipation (Note 1)	$P_d$	350	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{thJA}$	357	K/W
Operating and Storage Temp. Range	$T_j, T_{STG}$	-65 to +150	$^\circ\text{C}$

Notes: 1. Valid provided that device terminals are kept at ambient temperature

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## CTZ84C Series

### SPECIFICATIONS

Part Number	Marking	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current		Temperature Coefficient of Zener Voltage@I <sub>ZT</sub> -5Ma mV/°C	
		V <sub>Z</sub> @T <sub>ZT</sub>			I <sub>ZT</sub>	Z <sub>ZT</sub> @I <sub>ZT</sub>	Z <sub>ZK</sub> @I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub>	V <sub>R</sub>	Min.	Max.
		Nom. (V)	Min. (V)	Max. (V)	(mA)	(Ω)		(mA)	(μA)	(V)		
CTZ84C2V4	Z11	2.4	2.2	2.6	5	100	600	1.0	50	1.0	-3.5	0
CTZ84C2V7	Z12	2.7	2.5	2.9	5	100	600	1.0	20	1.0	-3.5	0
CTZ84C3V0	Z13	3.0	2.8	3.2	5	95	600	1.0	10	1.0	-3.5	0
CTZ84C3V3	Z14	3.3	3.1	3.5	5	95	600	1.0	5	1.0	-3.5	0
CTZ84C3V6	Z15	3.6	3.4	3.8	5	90	600	1.0	5	1.0	-3.5	0
CTZ84C3V9	Z16	3.9	3.7	4.1	5	90	600	1.0	3	1.0	-3.5	0
CTZ84C4V3	Z17	4.3	4.0	4.6	5	90	600	1.0	3	1.0	-3.5	0
CTZ84C4V7	Z1	4.7	4.4	5.0	5	80	500	1.0	3	2.0	-3.5	0.2
CTZ84C5V1	Z2	5.1	4.8	5.4	5	60	480	1.0	2	2.0	-2.7	1.2
CTZ84C5V6	Z3	5.6	5.2	6.0	5	40	400	1.0	1	2.0	-2.0	2.5
CTZ84C6V2	Z4	6.2	5.8	6.6	5	10	150	1.0	3	4.0	0.4	3.7
CTZ84C6V8	Z5	6.8	6.4	7.2	5	15	80	1.0	2	4.0	1.2	4.5
CTZ84C7V5	Z6	7.5	7.0	7.9	5	15	80	1.0	1	5.0	2.5	5.3
CTZ84C8V2	Z7	8.2	7.7	8.7	5	15	80	1.0	0.7	5.0	3.2	6.2
CTZ84C9V1	Z8	9.1	8.5	9.6	5	15	100	1.0	0.5	6.0	3.8	7.0
CTZ84C10	Z9	10	9.4	10.6	5	20	150	1.0	0.2	7.0	4.5	8.0
CTZ84C11	Y1	11	10.4	11.6	5	20	150	1.0	0.1	8.0	5.4	9.0
CTZ84C12	Y2	12	11.4	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0
CTZ84C13	Y3	13	12.4	14.1	5	30	170	1.0	0.1	8.0	7.0	11.0
CTZ84C15	Y4	15	13.8	15.6	5	30	200	1.0	0.1	10.5	9.2	13.0
CTZ84C16	Y5	16	15.3	17.1	5	40	200	1.0	0.1	11.2	10.4	14.0
CTZ84C18	Y6	18	16.8	19.1	5	45	225	1.0	0.1	12.6	12.4	16.0
CTZ84C20	Y7	20	18.8	21.2	5	55	225	1.0	0.1	14.0	14.4	18.0
CTZ84C22	Y8	22	20.8	23.3	5	55	250	1.0	0.1	15.4	16.4	20.0
CTZ84C24	Y9	24	22.8	25.6	5	70	250	1.0	0.1	16.8	18.4	22.0
CTZ84C27	Y10	27	25.1	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3
CTZ84C30	Y11	30	28.0	32.0	2	80	300	0.5	0.1	21.0	24.4	29.4
CTZ84C33	Y12	33	31.0	35.0	2	80	325	0.5	0.1	23.1	27.4	33.4
CTZ84C36	Y13	36	34.0	38.0	2	90	350	0.5	0.1	25.2	30.4	37.4
CTZ84C39	Y14	39	37.0	41.0	2	130	350	0.5	0.1	27.3	33.4	41.2

Notes: 2. Tested with pulses 300μs pulse width, period = 5ms.

3. f = 1KHz

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Manufacturer of Passive and Discrete Semiconductor Components

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