

# SMD Zener Diodes



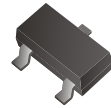
SMD Diodes Specialist

## CZRH3-55C2V4-G Thru CZRH3-55C39-G

Voltage: 2.4 to 39 Volts

Power: 150 mWatts

RoHS Device



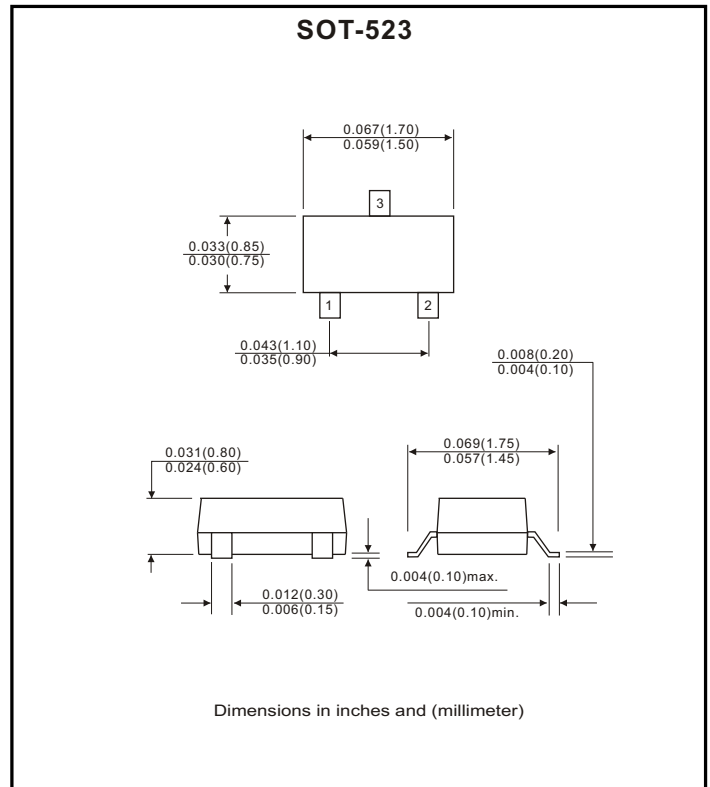
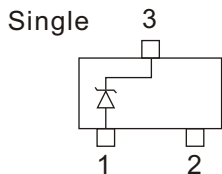
### Features

- Planar die construction.
- 150mW power dissipation.
- Ultra small surface mount package.
- Lead free/RoHS compliant.

### Mechanical data

- Case: SOT-523 , Molded plastic
- Terminals: Solderable per MIL-STD-202G, method 208
- Polarity: See diagram below
- Mounting position: Any

Marking: see table on page2



### Maximum Ratings (TA=25°C, unless otherwise specified)

Parameter	Symbol	Value	Unit
Forward voltage at IF=10mA (Note 2)	V <sub>F</sub>	0.9	V
Power dissipation (Note 1)	P <sub>D</sub>	150	mW
Thermal resistance, junction to ambient air	R <sub>θJA</sub>	833	°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

Note:

1. Device mounted on FR-4 PC board with recommended pad layout.

## Electrical Characteristics (Ta = 25 °C)

Part No.	Nominal Zener Voltage			Max. Zener Impedance				Max. Reverse Leakage Current		Temperature Coefficient of Zener Voltage @ IZT=5mA (mV/°C)		Marking Code
	VZ @ IZT			ZZT @ IZT		ZZK @ IZK		IR @ VR		Min.	Max.	
	Nom.	Min.	Max.	ohm	mA	ohm	mA	uA	V			
CZRH3-55C2V4	2.4	2.20	2.60	100	5.0	600	1.00	50.0	1.0	-3.5	0.0	RB
CZRH3-55C2V7	2.7	2.50	2.90	100	5.0	600	1.00	20.0	1.0	-3.5	0.0	RC
CZRH3-55C3V0	3.0	2.80	3.20	95	5.0	600	1.00	20.0	1.0	-3.5	0.0	RD
CZRH3-55C3V3	3.3	3.10	3.50	95	5.0	600	1.00	5.0	1.0	-3.5	0.0	RE
CZRH3-55C3V6	3.6	3.40	3.80	90	5.0	600	1.00	5.0	1.0	-3.5	0.0	RF
CZRH3-55C3V9	3.9	3.70	4.10	90	5.0	600	1.00	3.0	1.0	-3.5	0.0	RG
CZRH3-55C4V3	4.3	4.00	4.60	90	5.0	600	1.00	3.0	1.0	-3.5	0.0	RH
CZRH3-55C4V7	4.7	4.40	5.00	80	5.0	600	1.00	3.0	2.0	-3.5	0.2	R1
CZRH3-55C5V1	5.1	4.80	5.40	60	5.0	500	1.00	2.0	2.0	-2.7	1.2	R2
CZRH3-55C5V6	5.6	5.20	6.00	40	5.0	480	1.00	1.0	2.0	-2.0	2.5	R3
CZRH3-55C6V2	6.2	5.80	6.60	10	5.0	400	1.00	3.0	4.0	0.4	3.7	R4
CZRH3-55C6V8	6.8	6.40	7.20	15	5.0	150	1.00	2.0	4.0	1.2	4.5	R5
CZRH3-55C7V5	7.5	7.00	7.90	15	5.0	80	1.00	1.0	5.0	2.5	5.3	R6
CZRH3-55C8v2	8.2	7.70	8.70	15	5.0	80	1.00	0.7	5.0	3.2	6.2	R7
CZRH3-55C9v1	9.1	8.50	9.60	15	5.0	80	1.00	0.5	6.0	3.8	7.0	R8
CZRH3-55C10	10.0	9.40	10.60	20	5.0	100	1.00	0.2	7.0	4.5	8.0	R9
CZRH3-55C11	11.0	10.40	11.60	20	5.0	150	1.00	0.1	8.0	5.4	9.0	P1
CZRH3-55C12	12.0	11.40	12.70	25	5.0	150	1.00	0.1	8.0	6.0	10.0	P2
CZRH3-55C13	13.0	12.40	14.10	30	5.0	150	1.00	0.1	8.0	7.0	11.0	P3
CZRH3-55C15	15.0	13.80	15.60	30	5.0	170	1.00	0.1	10.5	9.2	13.0	P4
CZRH3-55C16	16.0	15.30	17.10	40	5.0	200	1.00	0.1	11.2	10.4	14.0	P5
CZRH3-55C18	18.0	16.80	19.10	45	5.0	200	1.00	0.1	12.6	12.4	16.0	P6
CZRH3-55C20	20.0	18.80	21.20	55	5.0	225	1.00	0.1	14.0	14.4	18.0	P7
CZRH3-55C22	22.0	20.80	23.30	55	5.0	225	1.00	0.1	15.4	16.4	20.0	P8
CZRH3-55C24	24.0	22.80	25.60	70	5.0	250	1.00	0.1	16.8	18.4	22.0	P9
CZRH3-55C27	27.0	25.10	28.90	80	2.0	250	0.50	0.1	18.9	21.4	25.3	PA
CZRH3-55C30	30.0	28.00	32.00	80	2.0	300	0.50	0.1	21.0	24.4	29.4	PB
CZRH3-55C33	33.0	31.00	35.00	80	2.0	300	0.50	0.1	23.1	27.4	33.4	PC
CZRH3-55C36	36.0	34.00	38.00	90	2.0	325	0.50	0.1	25.2	30.4	37.4	PD
CZRH3-55C39	39.0	37.00	41.00	130	2.0	350	0.50	0.1	27.3	33.4	41.2	PE

## Ratings and Characteristic Curves(CZRH3-55C2V4-G Thru. CZRG3-55C39-G)

Fig.1 Power Dissipation Derating Curve

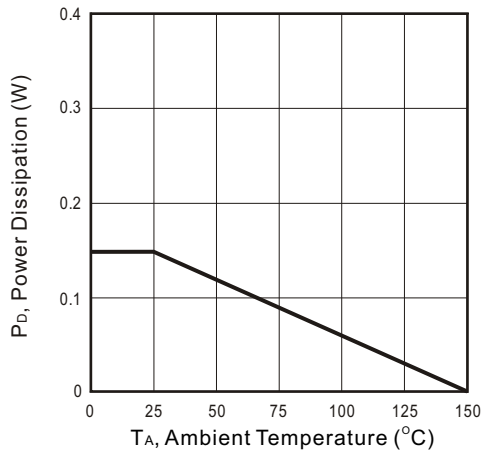


Fig.2 Zener Breakdown Characteristics

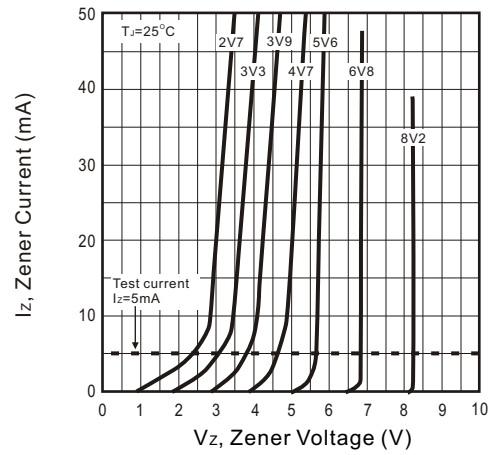


Fig.3 Zener Breakdown Characteristics

