

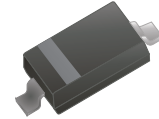
## CZRV52B2V4-HF Thru. CZRV52B51-HF

Voltage: 2.4 to 51 Volts

Power: 200 mWatts

RoHS Device

Halogen Free

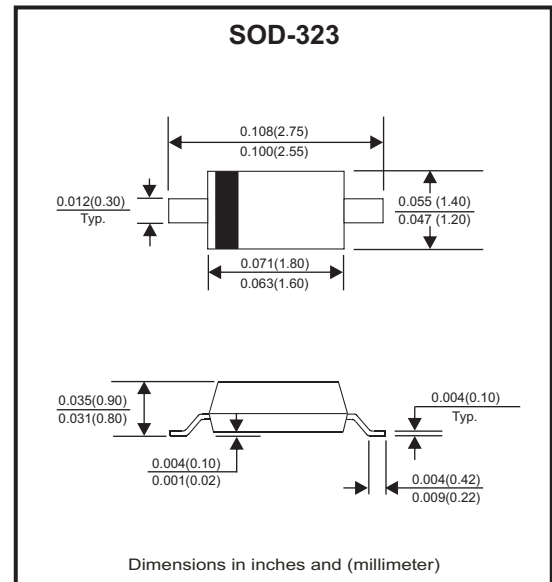


### Features

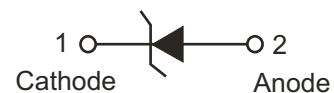
- Vz Tolerance selection of  $\pm 2\%$  (B series).
- Ideally suited for automated assembly processes.
- Moisture sensitivity level 1
- Ultra-small surface mount package.

### Mechanical data

- Case: SOD-323, Molded plastic.
- Terminals: Solder Plated, solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Weight: 0.004 gram (approx.).



### Circuit Diagram



### Maximum Ratings (@Ta=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Forward Voltage @ If=10mA	V <sub>F</sub>	0.9	V
Power Dissipation	P <sub>D</sub>	200	mW
Thermal resistance, junction to ambient air	R <sub>θJA</sub>	625	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

Notes: 1. These ratings are limiting values above which the serviceability of the diodes may be impaired.

## Electrical Characteristics (@Ta=25°C unless otherwise specified)

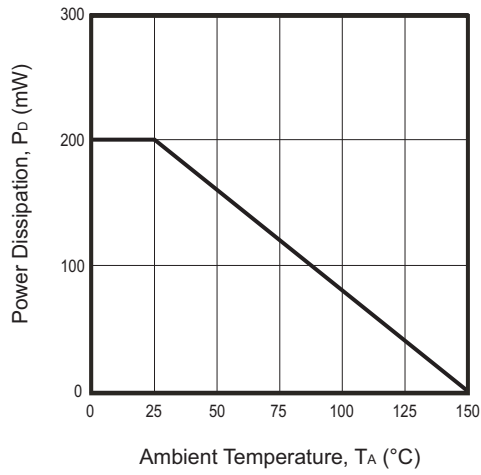
Part Number	Vz @ IzT (Volts)			ZzT @ IzT (Ohm)		Zzk @ Izk (Ohm)		IR @ VR (µA)		Marking Code
	Min	Nom	Max	Max	IzT(mA)	Max	Izk(mA)	Max	VR(V)	
CZRV52B2V4-HF	2.35	2.4	2.45	94	5	564	1.0	45	1.0	0Z
CZRV52B2V7-HF	2.65	2.7	2.75	94	5	564	1.0	18	1.0	1Z
CZRV52B3V0-HF	2.94	3.0	3.06	89	5	564	1.0	9	1.0	2Z
CZRV52B3V3-HF	3.23	3.3	3.37	89	5	564	1.0	4.5	1.0	3Z
CZRV52B3V6-HF	3.53	3.6	3.67	84	5	564	1.0	4.5	1.0	4Z
CZRV52B3V9-HF	3.82	3.9	3.98	84	5	564	1.0	2.7	1.0	5Z
CZRV52B4V3-HF	4.21	4.3	4.39	84	5	564	1.0	2.7	1.0	6Z
CZRV52B4V7-HF	4.61	4.7	4.79	75	5	564	1.0	2.7	2.0	7Z
CZRV52B5V1-HF	5.00	5.1	5.20	56	5	470	1.0	1.8	2.0	8Z
CZRV52B5V6-HF	5.49	5.6	5.71	37	5	451	1.0	0.9	2.0	9Z
CZRV52B6V2-HF	6.08	6.2	6.32	9	5	376	1.0	2.7	4.0	AZ
CZRV52B6V8-HF	6.66	6.8	6.94	14	5	141	1.0	1.8	4.0	BZ
CZRV52B7V5-HF	7.35	7.5	7.65	14	5	75	1.0	0.9	5.0	CZ
CZRV52B8V2-HF	8.04	8.2	8.36	14	5	75	1.0	0.63	5.0	DZ
CZRV52B9V1-HF	8.92	9.1	9.28	14	5	94	1.0	0.45	6.0	EZ
CZRV52B10-HF	9.80	10	10.20	18	5	141	1.0	0.18	7.0	FZ
CZRV52B11-HF	10.78	11	11.22	18	5	141	1.0	0.09	8.0	GZ
CZRV52B12-HF	11.76	12	12.24	23	5	141	1.0	0.09	8.0	HZ
CZRV52B13-HF	12.74	13	13.26	28	5	160	1.0	0.09	8.0	JZ
CZRV52B15-HF	14.70	15	15.30	28	5	188	1.0	0.045	10.5	KZ
CZRV52B16-HF	15.68	16	16.32	37	5	188	1.0	0.045	11.2	LZ
CZRV52B18-HF	17.64	18	18.36	42	5	212	1.0	0.045	12.6	MZ
CZRV52B20-HF	19.60	20	20.40	51	5	212	1.0	0.045	14.0	NZ
CZRV52B22-HF	21.56	22	22.44	51	5	235	1.0	0.045	15.4	PZ
CZRV52B24-HF	23.52	24	24.48	65	5	235	1.0	0.045	16.8	RZ
CZRV52B27-HF	26.46	27	27.54	75	5	282	0.5	0.045	18.9	SZ
CZRV52B30-HF	29.40	30	30.60	75	5	282	0.5	0.045	21.0	TZ
CZRV52B33-HF	32.34	33	33.66	75	5	306	0.5	0.045	23.0	UZ
CZRV52B36-HF	35.28	36	36.72	84	5	329	0.5	0.045	25.2	VZ
CZRV52B39-HF	38.22	39	39.78	122	5	329	0.5	0.045	27.3	WZ
CZRV52B43-HF	32.34	43	43.86	141	5	353	0.5	0.045	30.1	XZ
CZRV52B47-HF	35.28	47	47.94	160	5	353	0.5	0.045	33.0	YZ
CZRV52B51-HF	49.98	51	52.02	169	5	376	0.5	0.045	35.7	ZZ

Company reserves the right to improve product design , functions and reliability without notice.

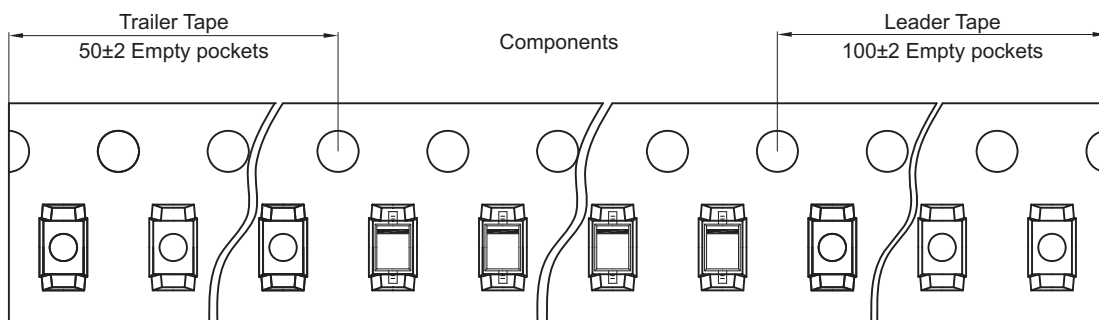
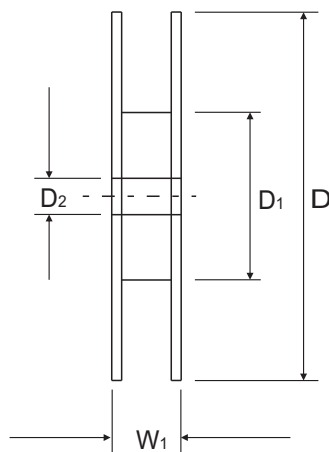
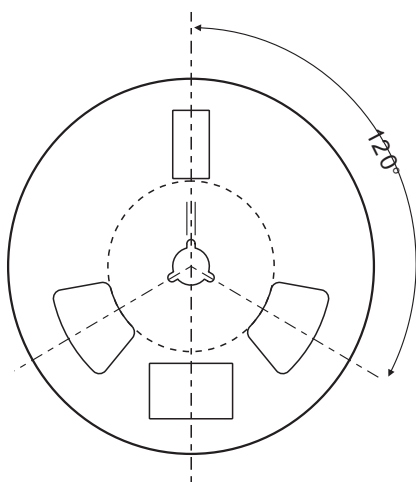
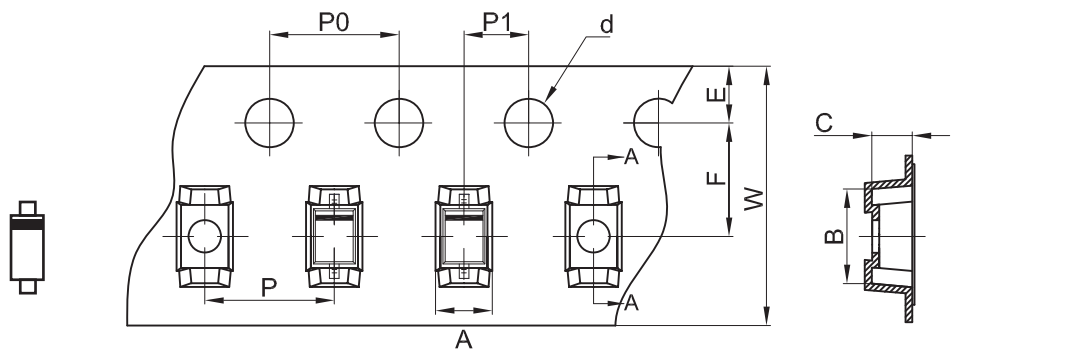
REV:A

## RATING AND CHARACTERISTIC CURVES (CZRV52B2V4-HF Thru. CZRV52B51-HF)

Fig.1 - Power Derating Curve



## Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.46 ± 0.05	3.30 ± 0.05	1.25 ± 0.05	1.50 ± 0.10	178.00 ± 1.00	54.40 ± 1.00	13.00 ± 0.50
	(inch)	0.057 ± 0.002	0.130 ± 0.002	0.049 ± 0.002	0.059 ± 0.004	7.008 ± 0.039	2.142 ± 0.039	0.512 ± 0.020

SOD-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.484 ± 0.039

## Marking Code

Part Number	Marking Code
CZRV52B2V4-HF ~ CZRV52B51-HF	XX

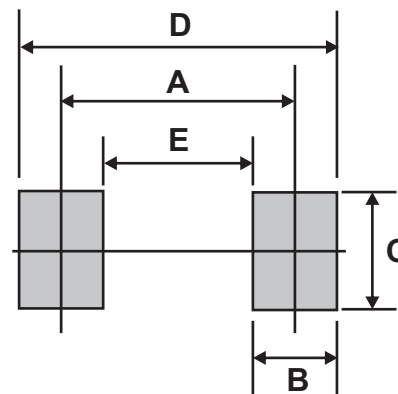


XX = Product type marking code (See page.2)

█ = The marking bar indicates the cathode.

## Suggested PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	2.23	0.088
B	0.63	0.025
C	0.83	0.033
D	2.86	0.113
E	1.60	0.063



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
SOD-323	3,000	7