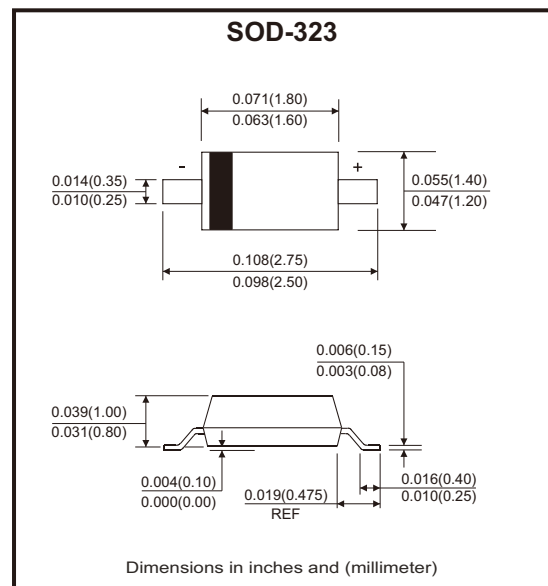


CZRV52C2V4S-HF Thru. CZRV52C43S-HF**Voltage: 2.4 to 43 Volts****Power: 200 mWatts****RoHS Device****Halogen Free****Features**

- Planar die construction.
- 200mW power dissipation on ceramic PCB.
- General purpose, medium current.
- Ideally suited for automated assembly processes.

Mechanical Data

- Case: SOD-323, molded plastic.
- Polarity: Indicated by cathode end.
- Mounting position: Any.

**Circuit Diagram****Maximum Ratings** (@Ta=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Forward voltage @ If=10mA (Note 2)	V _F	0.9	V
Power dissipation (Note 1)	P _D	200	mW
Thermal resistance from junction to ambient	R _{θJA}	625	°C/W
Operation junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

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

Part No.	Zener Voltage Range (Note 2)				Max. Zener Impedance f = 1kHz			Max. Reverse Current (Note 2)		Typical Temperature Coefficient @ I _{ZTC} mV/°C		Test Current I _{ZTC}	Marking Code
	V _Z @ I _{ZT}			I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R					
	Min(V)	Nom(V)	Max(V)	mA	Ω	Ω	mA	μA	V				
CZRV52C2V4S-HF	2.2	2.4	2.6	5	100	600	1.0	50	1.0	-3.5	0	5	WX
CZRV52C2V7S-HF	2.5	2.7	2.9	5	100	600	1.0	20	1.0	-3.5	0	5	W1
CZRV52C3V0S-HF	2.8	3.0	3.2	5	95	600	1.0	10	1.0	-3.5	0	5	W2
CZRV52C3V3S-HF	3.1	3.3	3.5	5	95	600	1.0	5	1.0	-3.5	0	5	W3
CZRV52C3V6S-HF	3.4	3.6	3.8	5	90	600	1.0	5	1.0	-3.5	0	5	W4
CZRV52C3V9S-HF	3.7	3.9	4.1	5	90	600	1.0	3	1.0	-3.5	0	5	W5
CZRV52C4V3S-HF	4.0	4.3	4.6	5	90	600	1.0	3	1.0	-3.5	0	5	W6
CZRV52C4V7S-HF	4.4	4.7	5.0	5	80	500	1.0	3	2.0	-3.5	0.2	5	W7
CZRV52C5V1S-HF	4.8	5.1	5.4	5	60	480	1.0	2	2.0	-2.7	1.2	5	W8
CZRV52C5V6S-HF	5.2	5.6	6.0	5	40	400	1.0	1	2.0	-2	2.5	5	W9
CZRV52C6V2S-HF	5.8	6.2	6.6	5	10	150	1.0	3	4.0	0.4	3.7	5	WA
CZRV52C6V8S-HF	6.4	6.8	7.2	5	15	80	1.0	2	4.0	1.2	4.5	5	WB
CZRV52C7V5S-HF	7.0	7.5	7.9	5	15	80	1.0	1	5.0	2.5	5.3	5	WC
CZRV52C8V2S-HF	7.7	8.2	8.7	5	15	80	1.0	0.7	5.0	3.2	6.2	5	WD
CZRV52C9V1S-HF	8.5	9.1	9.6	5	15	100	1.0	0.5	6.0	3.8	7	5	WE
CZRV52C10S-HF	9.4	10.0	10.6	5	20	150	1.0	0.2	7.0	4.5	8	5	WF
CZRV52C11S-HF	10.4	11.0	11.6	5	20	150	1.0	0.1	8.0	5.4	9	5	WG
CZRV52C12S-HF	11.4	12.0	12.7	5	25	150	1.0	0.1	8.0	6	10	5	WH
CZRV52C13S-HF	12.4	13.0	14.1	5	30	170	1.0	0.1	8.0	7	11	5	WI
CZRV52C15S-HF	13.8	15.0	15.6	5	30	200	1.0	0.1	10.5	9.2	13	5	WJ
CZRV52C16S-HF	15.3	16.0	17.1	5	40	200	1.0	0.1	11.2	10.4	14	5	WK
CZRV52C18S-HF	16.8	18.0	19.1	5	45	225	1.0	0.1	12.6	12.4	16	5	WL
CZRV52C20S-HF	18.8	20.0	21.2	5	55	225	1.0	0.1	14.0	14.4	18	5	WM
CZRV52C22S-HF	20.8	22.0	23.3	5	55	250	1.0	0.1	15.4	16.4	20	5	WN
CZRV52C24S-HF	22.8	24.0	25.6	5	70	250	1.0	0.1	16.8	18.4	22	5	WO
CZRV52C27S-HF	25.1	27.0	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2	WP
CZRV52C30S-HF	28.0	30.0	32.0	2	80	300	0.5	0.1	21.0	24.4	29.4	2	WQ
CZRV52C33S-HF	31.0	33.0	35.0	2	80	325	0.5	0.1	23.1	27.4	33.4	2	WR
CZRV52C36S-HF	34.0	36.0	38.0	2	90	350	0.5	0.1	25.2	30.4	37.4	2	WS
CZRV52C39S-HF	37.0	39.0	41.0	2	130	350	0.5	0.1	27.3	33.4	41.2	2	WT
CZRV52C43S-HF	40.0	43.0	46.0	2	100	700	1.0	0.1	32.0	10	12	5	WU

Notes: 1. Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm².
2. Short duration test pulse used to minimize self-heating effect.

Rating and Characteristic Curves (CZRV52C2V4S-HF Thru. CZRV52C43S-HF)

Fig.1 - Zener Characteristics

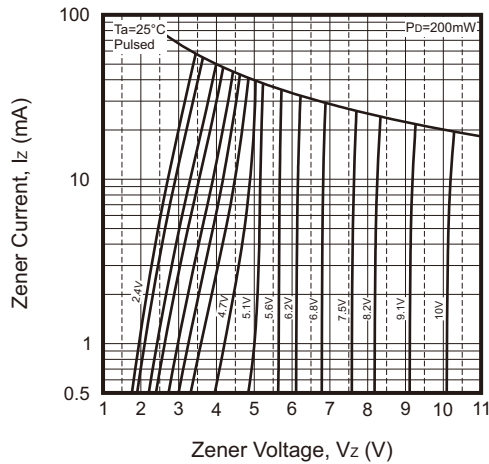


Fig.2 - Zener Characteristics

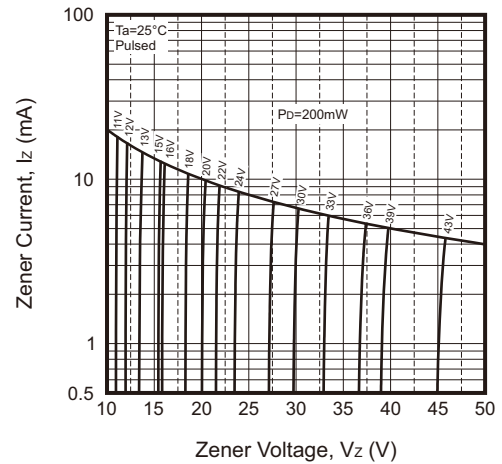


Fig.3 - Temperature Coefficients

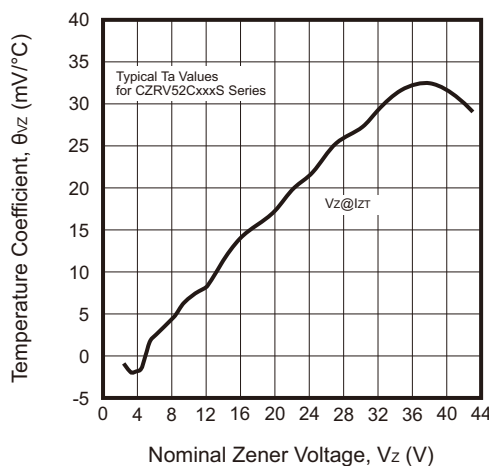


Fig.4 - Typical Leakage Current

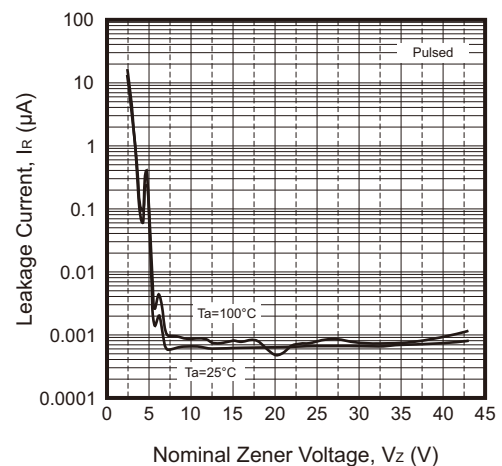


Fig.5 - Typical Capacitance

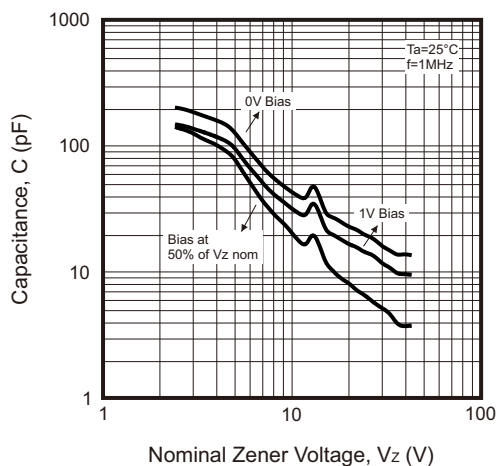
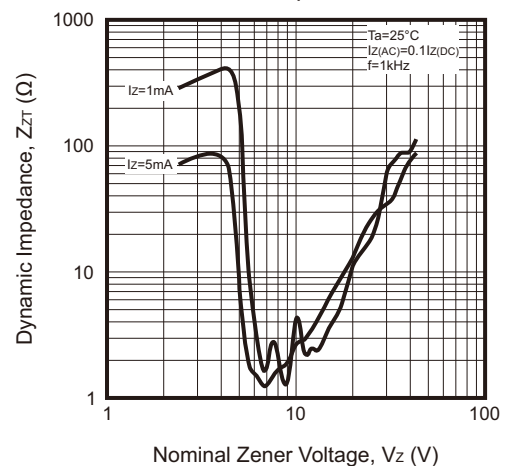
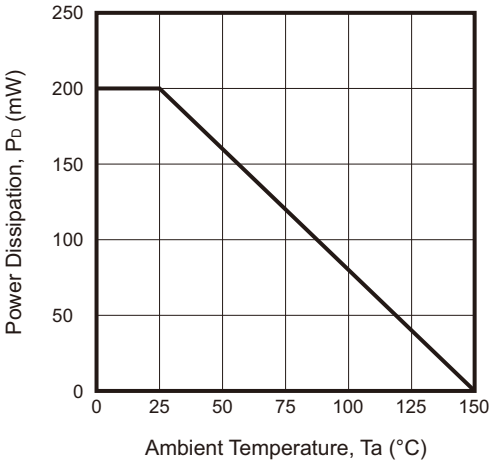


Fig.6 - Effect of Zener Voltage on Zener Impedance

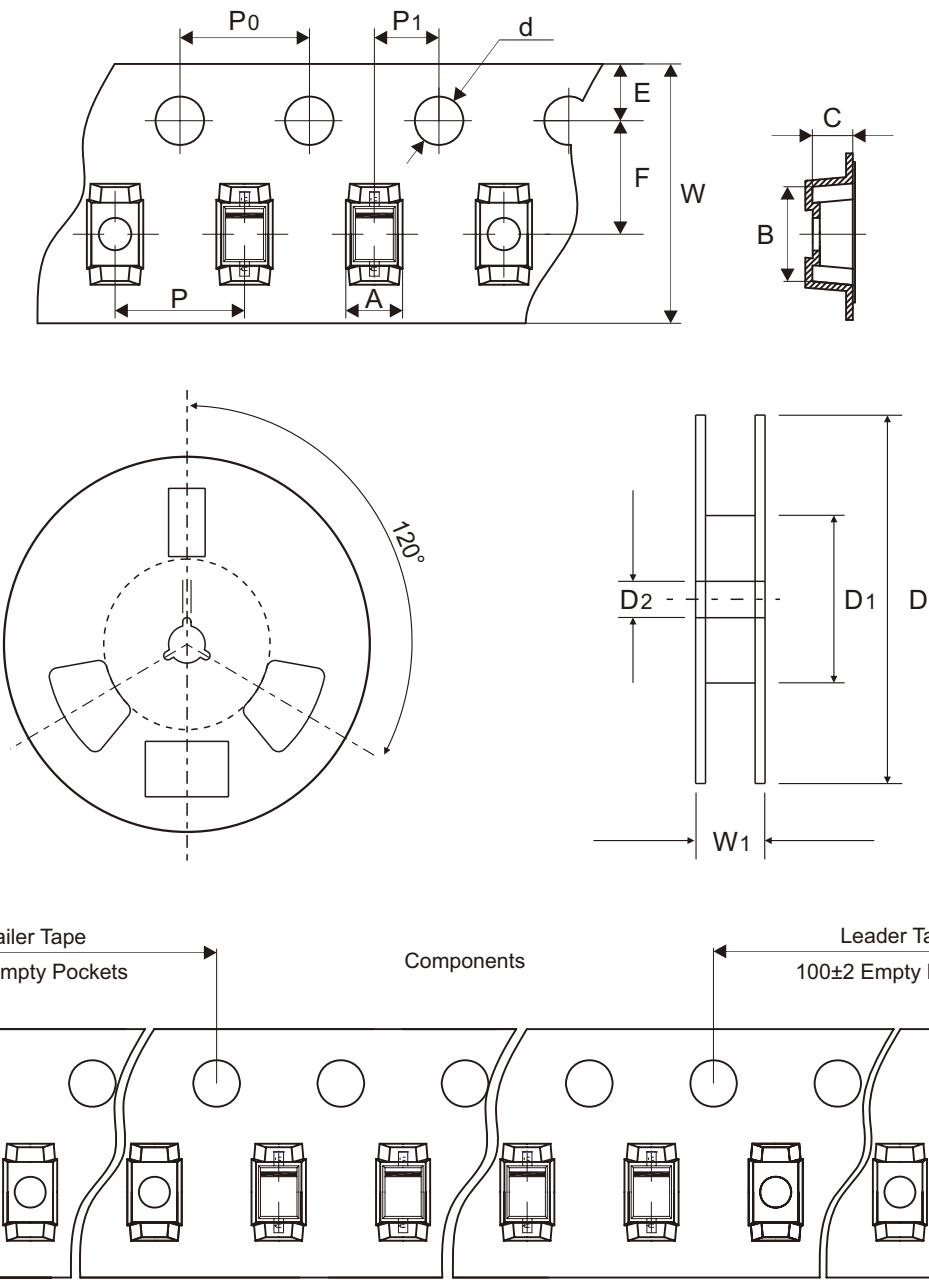


Rating and Characteristic Curves (CZRV52C2V4S-HF Thru. CZRV52C43S-HF)

Fig.7 - Power Derating Curve



Reel Taping Specification



SOD-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.48 ± 0.05	3.30 ± 0.05	1.25 ± 0.05	1.50 + 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.058 ± 0.002	0.130 ± 0.002	0.049 ± 0.002	0.059 + 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOD-323	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 + 0.30 - 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 - 0.004	0.484 ± 0.039

Marking Code

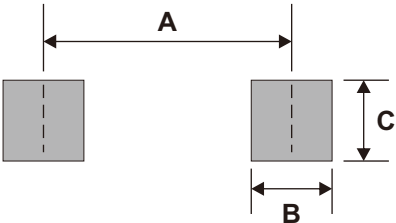
Part Number	Marking Code
CZRV52C2V4S-HF Thru. CZRV52C43S-HF	See Page.2



█ = Cathode band
Solid dot = Control code
xx = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOD-323	
	(mm)	(inch)
A	2.15	0.085
B	0.70	0.028
C	0.70	0.028



Standard Packaging

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