

Electrical Characteristics(Ta = 25C) °

Part Number	Marking Code	Zener Voltage			Operating resistance		Rising operating Resistance		Reverse current	
		V _Z (V)			ZZT(Ohm)		ZZK(Ohm)		IR(uA)	
		Min	Max	I _Z (mA)	Max	I _Z (mA)	Max	I _Z (mA)	Max	V _R (V)
CZRU52C2	Z0	1.90	2.10	5	100	5	600	1	100	1
CZRU52C2V2	Z1	2.09	2.31	5	100	5	600	1	100	1
CZRU52C2V4	Z2	2.28	2.52	5	85	5	600	1	100	1
CZRU52C2V7	Z3	2.57	2.84	5	83	5	500	1	75	1
CZRU52C3	Z4	2.85	3.15	5	95	5	500	1	50	1
CZRU52C3V3	Z5	3.14	3.47	5	95	5	500	1	25	1
CZRU52C3V6	Z6	3.42	3.78	5	95	5	500	1	15	1
CZRU52C3V9	Z7	3.71	4.10	5	95	5	500	1	10	1
CZRU52C4V3	Z8	4.09	4.52	5	95	5	500	1	5	1
CZRU52C4V7	Z9	4.47	4.94	5	78	5	500	1	5	2
CZRU52C5V1	ZA	4.85	5.36	5	60	5	480	1	0.1	0.8
CZRU52C5V6	ZB	5.32	5.88	5	40	5	400	1	0.1	1
CZRU52C6V2	ZC	5.89	6.51	5	10	5	200	1	0.1	2
CZRU52C6V8	ZE	6.46	7.14	5	8	5	150	1	0.1	3
CZRU52C7V5	ZF	7.13	7.88	5	7	5	50	1	0.1	5
CZRU52C8V2	ZG	7.79	8.61	5	7	5	50	1	0.1	6
CZRU52C9V1	ZH	8.65	9.56	5	10	5	50	1	0.1	7
CZRU52C10	ZJ	9.50	10.50	5	15	5	70	1	0.1	7.5
CZRU52C11	ZK	10.45	11.55	5	20	5	70	1	0.1	8.5
CZRU52C12	ZM	11.40	12.60	5	20	5	90	1	0.1	9
CZRU52C13	ZN	12.35	13.65	5	25	5	110	1	0.1	10
CZRU52C15	ZP	14.25	15.75	5	30	5	110	1	0.1	11
CZRU52C16	ZQ	15.20	16.80	5	40	5	170	1	0.1	12
CZRU52C18	ZR	17.10	18.90	5	50	5	170	1	0.1	14
CZRU52C20	ZS	19.00	21.00	5	50	5	220	1	0.1	15
CZRU52C22	ZT	20.90	23.10	5	55	5	220	1	0.1	17
CZRU52C24	ZU	22.80	25.20	5	80	5	220	1	0.1	18
CZRU52C27	ZV	25.65	28.35	5	80	5	250	1	0.1	20
CZRU52C30	ZW	28.50	31.50	5	80	5	250	1	0.1	23
CZRU52C33	ZX	31.35	34.65	5	80	5	250	1	0.1	25
CZRU52C36	ZY	34.20	37.80	5	90	5	250	1	0.1	27
CZRU52C39	ZZ	37.05	40.95	5	90	5	300	1	0.1	29

RATING AND CHARACTERISTIC CURVES (CZRU52C2 Thru CZRU52C39)

Fig.1 TEMPERATURE COEFFICENTS

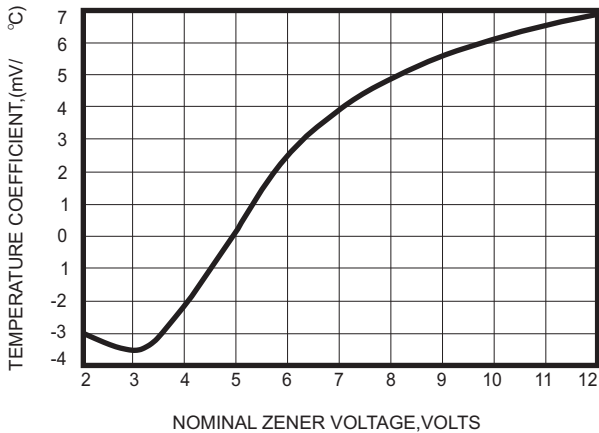


Fig.2 TEMPERATURE COEFFICENTS

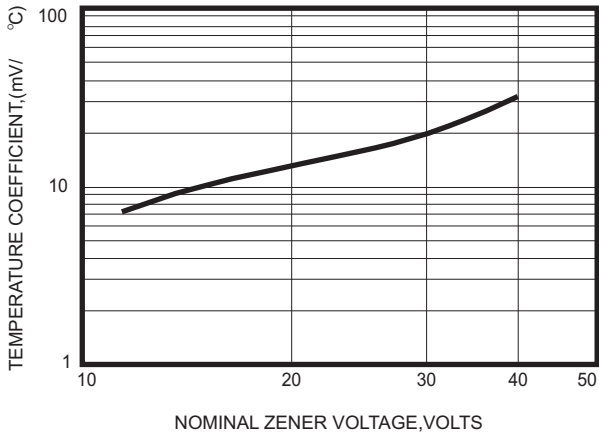


Fig.3 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

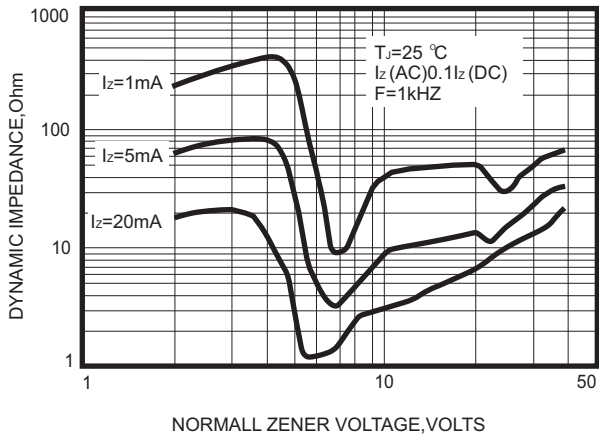


Fig.4 TYPICAL FORWARD VOLTAGE

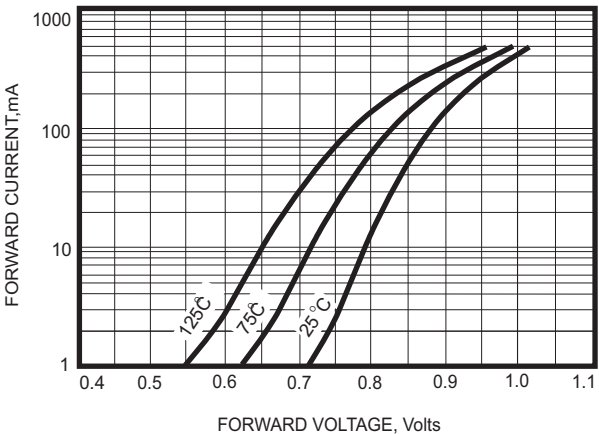


Fig.5 TYPICAL LEAKAGE CURRENT

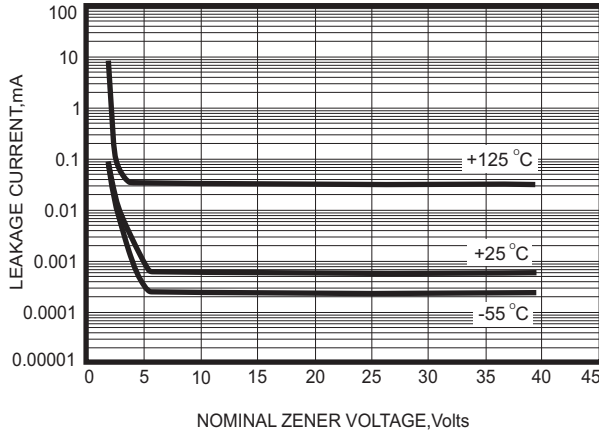
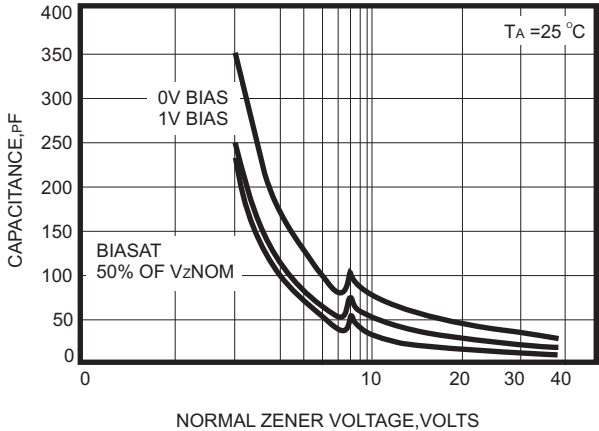


Fig.6 TYPICAL CAPACITANCE



RATING AND CHARACTERISTIC CURVES (CZRU52C2 Thru CZRU52C39)

Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

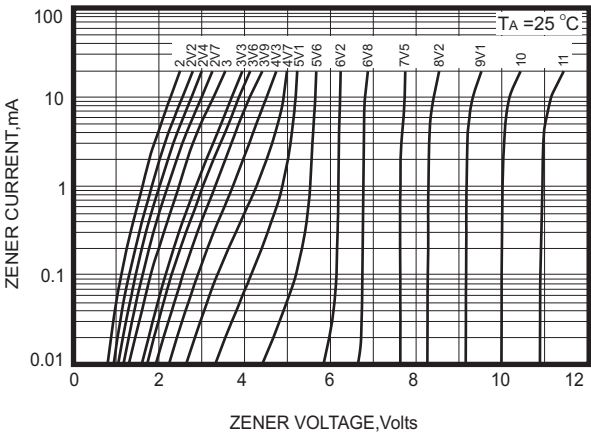


Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT

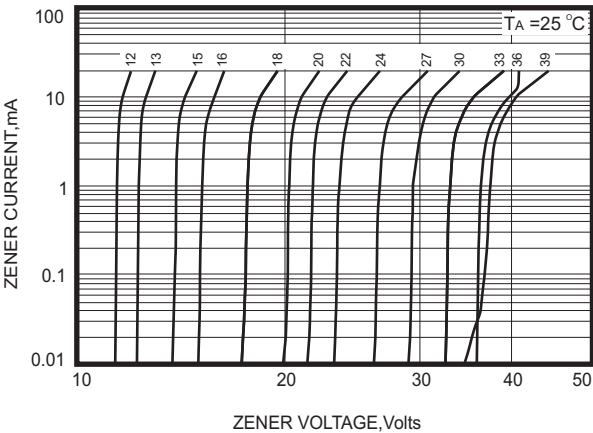


Fig.9 STEADY STATE POWER DERATING

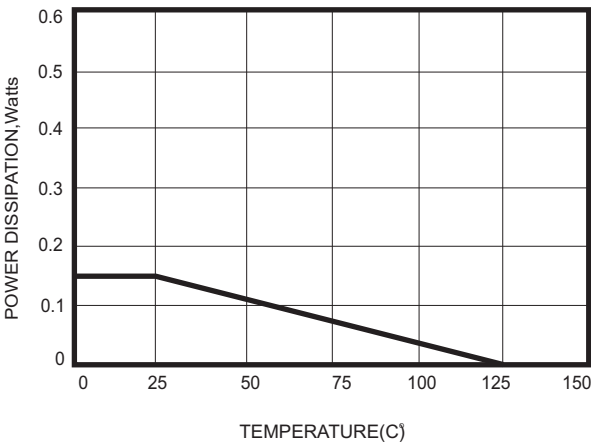


Figure 1 illustrates the dimensions and geometry of the device, showing various views and sections.

Top View (Left): Shows the device's footprint with dimensions P_0 , P_1 , d , E , F , W , B , P , and A . It includes an "Index hole" and a "Polarity" arrow.

Side View (Top Right): Shows the device's profile with dimensions T , C , and W .

Top View (Bottom Left): Shows the device's footprint with a 120° angle and dimensions D_1 , D_2 , and W_1 .

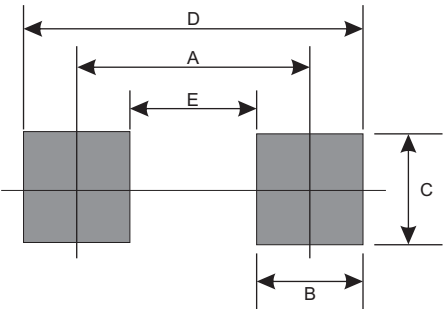
Side View (Bottom Right): Shows the device's profile with dimensions D_1 , D_2 , and W_1 .

Device Layout (Bottom): Shows the device divided into three sections: Trailer, Device, and Leader. The Trailer and Leader sections are 10 pitches (min) long. The device is used for feeding a material from "End" to "Start".

0603 (SOD-523F)	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.23 ± 0.05	8.00 ± 0.20	13.5 MAX.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

Suggested PAD Layout

SIZE	0603/SOD-523F	
	(mm)	(inch)
A	1.70	0.067
B	0.60	0.024
C	0.80	0.031
D	2.30	0.091
E	1.10	0.043



Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
0603/SOD-523F	4000	7