

CZRU52C2 Thru CZRU52C39

Voltage 2 to 39 Volts Power 150 mWatts RoHS Device



Features

- -150mW Power Dissipation.
- -High Voltages from 2 ~ 39 V.
- -Designed for mounting on small surface.
- -Extremely thin/leadless package.
- -Pb free product.

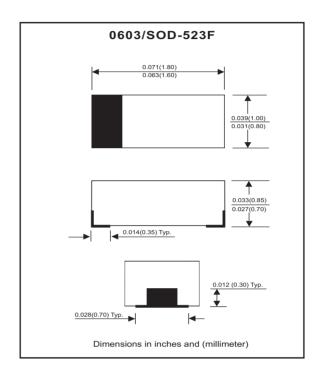
Mechanical data

-Case: 0603/SOD-523F Standard package Molded plastic.

-Terminals: Gold plated, solderable per MIL-STD-750,method 2026.

-Polarity: Indicated by cathode band.

-Weight: 0.003 gram(approx.).



Maximum Rating AND Electrical Characteristics

Parameter	Symbol	Value	Unit
Maximum Forward Voltage Drop at IF = 10 mA	VF	0.9	V
Maximum Power Dissipation at 25 C °	Po	150	mW
Forward current , surge peak 8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	IFSM	2.0	А
Peak ESD voltage capability (IEC 61000-4-2)	VPV	8	kV
Operating Junction and Storage Temperature Range	TJ	-55 to +125	°C

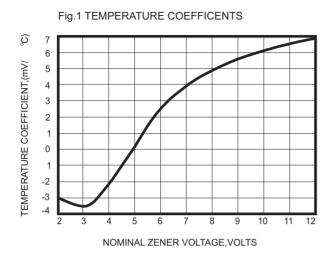


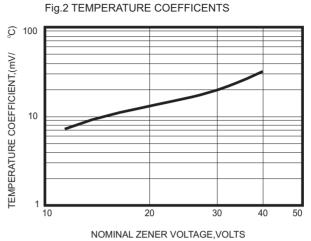
Electrical Characteristics(Ta = 25C) $^{\circ}$

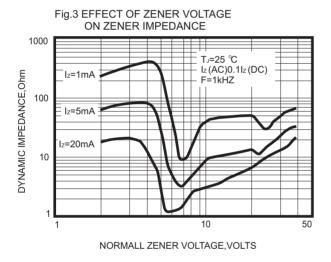
					Oper	ating		ing	Revi	arsa
Part Number	Marking Code	Zener Voltage			Operating resistance		operating Resistance		Reverse current	
	3343	Vz(V)			ZZT(Ohm)		ZZK(Ohm)		IR(uA)	
		Min	Max	Iz(mA)	Max	Iz(mA)	Max	lz(mA)	Max	V _R (V)
CZRU52C2	Z0	1.90	2.10	5	100	5	600	1	100	1
CZRU52C2V2	Z 1	2.09	2.31	5	100	5	600	1	100	1
CZRU52C2V4	Z2	2.28	2.52	5	85	5	600	1	100	1
CZRU52C2V7	Z 3	2.57	2.84	5	83	5	500	1	75	1
CZRU52C3	Z 4	2.85	3.15	5	95	5	500	1	50	1
CZRU52C3V3	Z 5	3.14	3.47	5	95	5	500	1	25	1
CZRU52C3V6	Z 6	3.42	3.78	5	95	5	500	1	15	1
CZRU52C3V9	Z 7	3.71	4.10	5	95	5	500	1	10	1
CZRU52C4V3	Z 8	4.09	4.52	5	95	5	500	1	5	1
CZRU52C4V7	Z 9	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

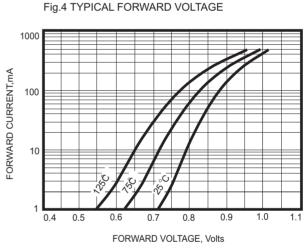


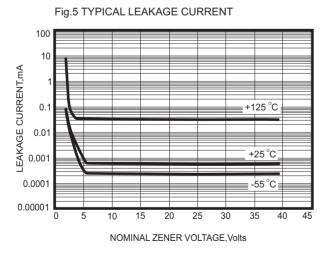
RATING AND CHARACTERISTIC CURVES (CZRU52C2 Thru CZRU52C39)

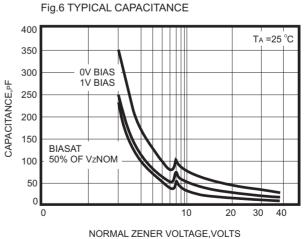














RATING AND CHARACTERISTIC CURVES (CZRU52C2 Thru CZRU52C39)

Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

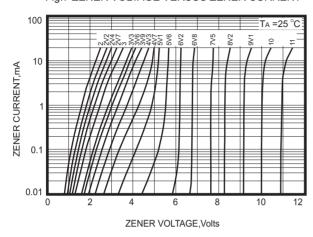


Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT

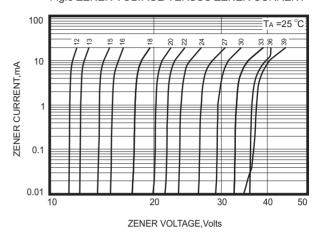
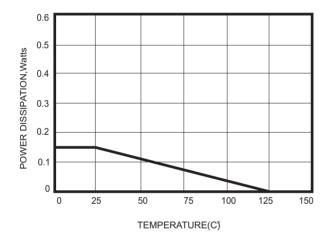
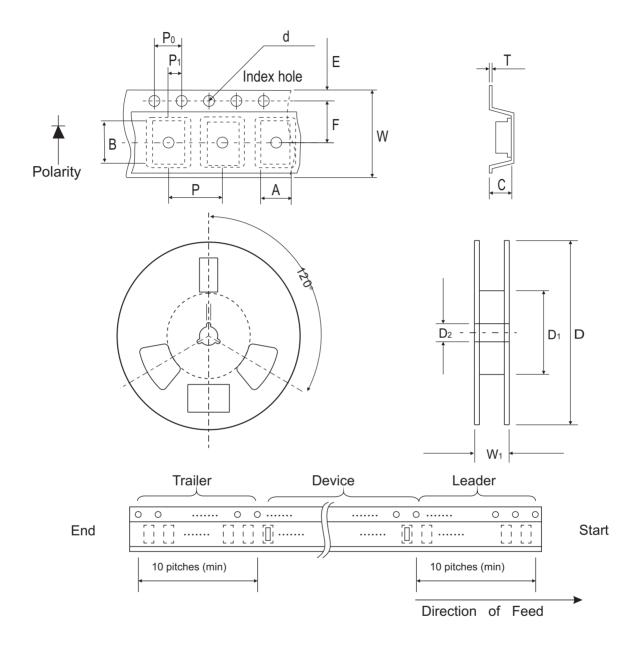


Fig.9 STEADY STATE POWER DERATING





Reel Taping Specification



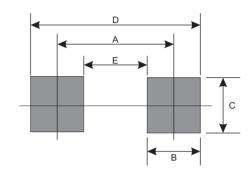
	SYMBOL	Α	В	С	d	D	D ₁	D ₂
0603 (SOD-523F)	(mm)	1.00 ± 0.10	1.85 ± 0.10	1.00 ± 0.10	1.55 ± 0.05	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.039 ± 0.004	0.073 ± 0.004	0.039 ± 0.004	0.061 ± 0.002	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

	SYMBOL	Е	F	Р	Po	P ₁	Т	W	W ₁
0603 (SOD-523F)	(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				
SIZE	(mm)	(inch)			
Α	1.70	0.067			
В	0.60	0.024			
С	0.80	0.031			
D	2.30	0.091			
E	1.10	0.043			



Standard Package

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