

Surface Mount Zener Diodes

CZRW55C2V4-G thru CZRW55C39-G

Voltage: 2.4 ~ 29 Volts

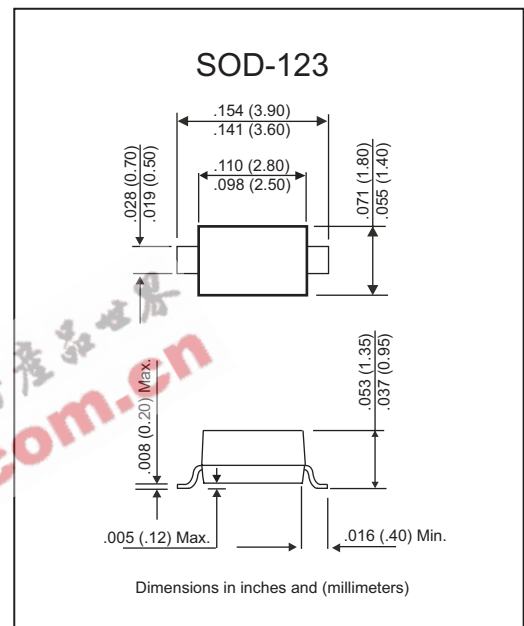
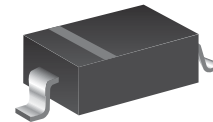
Power: 410 mW

Features:

- Planar Die Constructions
- 410mW Power Dissipation
- Zener Voltages from 2.4V ~ 39V
- Ideally Suited for Automated Assembly Processes

Mechanical Data:

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Approx. Weight: 0.008 gram



Maximum Ratings and Thermal Characteristics

Parameter	Symbols	Value	Units
Power Dissipation (Note A) at 75°C	P_D	410	mW
Peak Forward Surge Current Surge, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) (Note B)	I_{FSM}	2	Amps
Operating Junction and Storage Temperature Range	T_J	-55 to +150	°C

Notes:

A. Mounted on 5.0mm²(.013mm thick) land areas.

B. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

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Maximum Ratings and Electrical Characteristics

(T_A=25°C unless otherwise noted) V_F=1.2V max, I_F=100mA for all types

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Max Zener Current
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		I _{ZM} @ T _A
	Nom. V	Min. V	Max. V	Ohm	mA	Ohm	mA	nA	V	mA
410 mWatts Zener Diodes										
CZRW55C2V4-G	2.4	2.28	2.56	85	5	600	1	100000	1	-
CZRW55C2V7-G	2.7	2.5	2.9	83	5	500	1	75000	1	134
CZRW55C3V0-G	3.0	2.8	3.2	95	5	500	1	50000	1	118
CZRW55C3V3-G	3.3	3.1	3.5	95	5	500	1	25000	1	109
CZRW55C3V6-G	3.6	3.4	3.8	95	5	500	1	15000	1	100
CZRW55C3V9-G	3.9	3.7	4.1	95	5	500	1	10000	1	92
CZRW55C4V3-G	4.3	4	4.6	95	5	500	1	5000	1	84
CZRW55C4V7-G	4.7	4.4	5	78	5	500	1	5000	1	76
CZRW55C5V1-G	5.1	4.8	5.4	60	5	480	1	100	0.8	67
CZRW55C5V6-G	5.6	5.2	6	40	5	400	1	100	1	59
CZRW55C6V2-G	6.2	5.8	6.6	10	5	200	1	100	2	54
CZRW55C6V8-G	6.8	6.4	7.2	8	5	150	1	100	3	49
CZRW55C7V5-G	7.5	7	7.9	7	5	50	1	100	5	44
CZRW55C8V2-G	8.2	7.7	8.7	7	5	50	1	100	6	40
CZRW55C9V1-G	9.1	8.5	9.6	10	5	50	1	100	7	36
CZRW55C10-G	10.0	9.4	10.6	15	5	70	1	100	7.5	33
CZRW55C11-G	11.0	10.4	11.6	20	5	70	1	100	8.5	30
CZRW55C12-G	12.0	11.4	12.7	20	5	90	1	100	9	28
CZRW55C13-G	13.0	12.4	14.1	25	5	110	1	100	10	25
CZRW55C15-G	15	13.8	15.6	30	5	110	1	100	11	23
CZRW55C16-G	16	15.3	17.1	40	5	170	1	100	12	20
CZRW55C18-G	18	16.8	19.1	50	5	170	1	100	14	18
CZRW55C20-G	20	18.8	21.2	50	5	220	1	100	15	17
CZRW55C22-G	22	20.8	23.3	55	5	220	1	100	17	16
CZRW55C24-G	24	22.8	25.6	80	5	220	1	100	18	13
CZRW55C27-G	27	25.1	28.9	80	5	250	1	100	20	12
CZRW55C30-G	30	28	32	80	5	250	1	100	22.5	10
CZRW55C33-G	33	31	35	80	5	250	1	100	25	9
CZRW55C36-G	36	34	38	90	5	250	1	100	27	9
CZRW55C39-G	39	37	41	90	5	300	1	100	29	8

NOTE:

1.Tolerance and Type Number Designation. The type numbers listed have a standard tolerance on the nominal zener voltage of ±5%.

2.Specials Available Include:

A. Nominal zener voltages between the voltages shown and tighter voltage tolerances.

B. Matched sets.

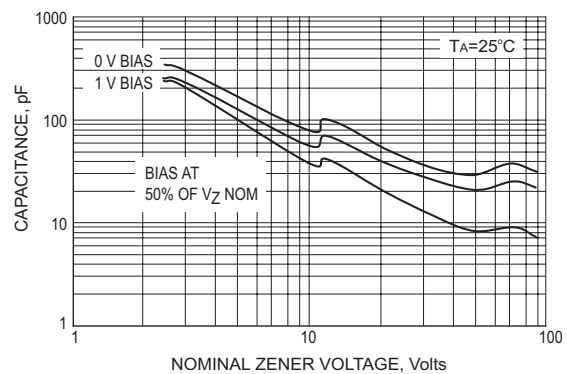
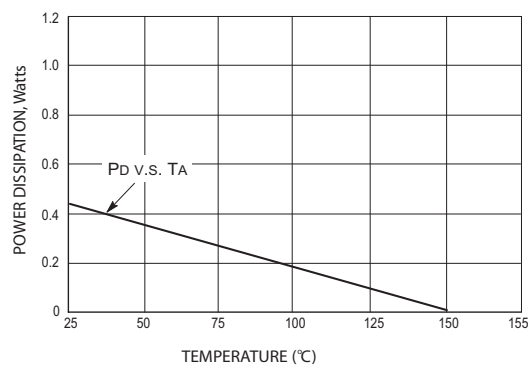
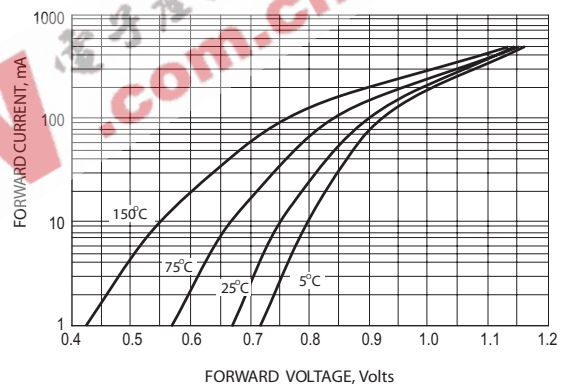
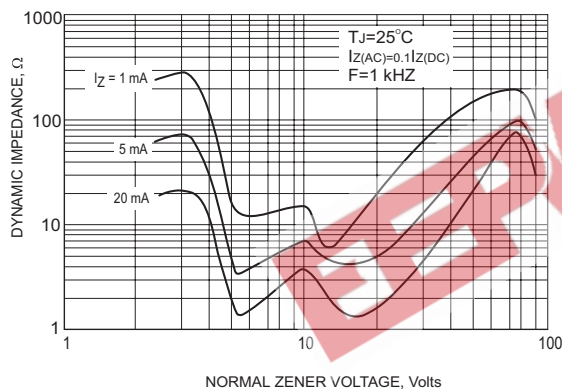
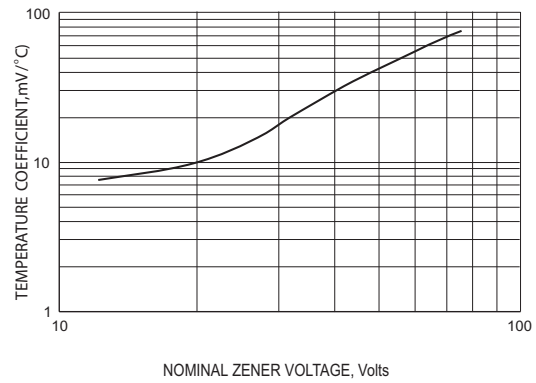
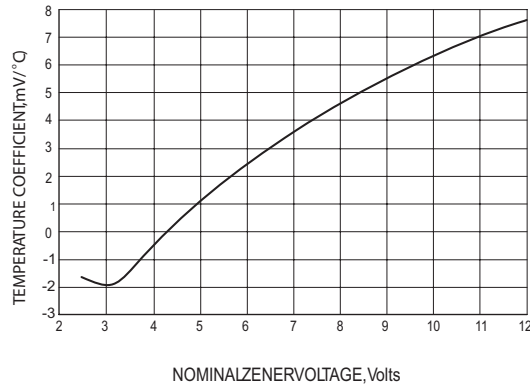
3.Zener Voltage (VZ) Measurement. Guarantees the zener voltage when measured at 90 seconds while maintaining the lead temperature (TL) at 300C, from the diode body.

4.Zener Impedance (ZZ) Derivation. The zener impedance is derived from the 60 cycle ac voltage, which results when an AC current having an rms value equal to 10% of the dc zener current (IZT or IZK) is superimposed on IZT or IZK.

5.Surge Current (IR) Non-Repetitive. The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equivalent sine wave pulse of 1/120 second duration superimposed on the test current, IZT, per JEDEC registration; however, actual device capability is as described in Figure 5.

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