

(RoHS Device)

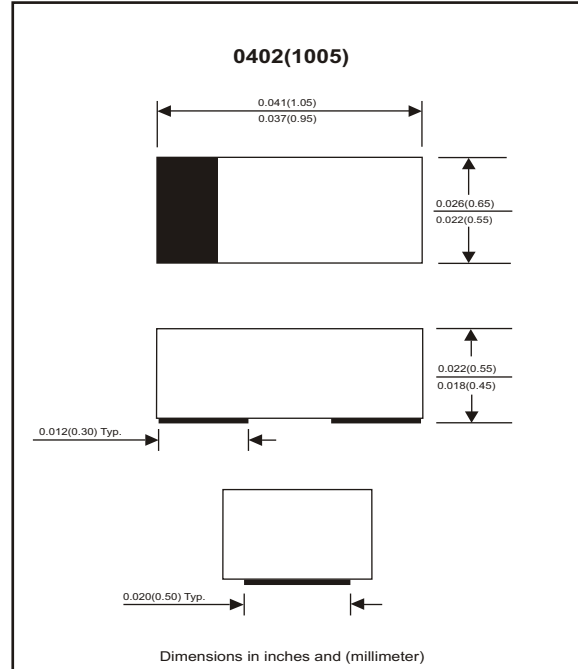
Voltage 2 to 39 Volts
Power 125 mWatts

Features

- 125mW Power Dissipation.
- High Voltages from 2 ~ 39 V.
- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Pb free product.

Mechanical data

- Case: 0402(1005)Standard package
Molded plastic.
- Terminals: Gold plated, solderable per
MIL-STD-750,method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.001 gram(approx.).



Maximum Rating AND Electrical Characteristics

Parameter	Symbol	Value	Unit
Maximum Forward Voltage Drop at $I_F = 10 \text{ mA}$	V_F	0.9	V
Maximum Power Dissipation at $25 \text{ C } ^\circ$	P_D	125	mW
Forward current , surge peak 8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}	2.0	A
Peak ESD voltage capability (IEC 61000-4-2)	V_{PV}	8	kV
Operating Junction and Storage Temperature Range	T_J	-55 to +125	$^\circ\text{C}$



Electrical Characteristics (TA=25°C)

Part Number	Marking Code	Zener Voltage			Operating resistance		Rising operating Resistance		Reverse current	
		V _Z (V)			ZZT(Ohm)		ZZK(Ohm)		IR(μA)	
		Min	Max	I _Z (mA)	Max	I _Z (mA)	Max	I _Z (mA)	Max	V _R (V)
CDZ55C2V0QR	Z0	1.90	2.10	5	100	5	600	1	100	1
CDZ55C2V2QR	Z1	2.09	2.31	5	100	5	600	1	100	1
CDZ55C2V4QR	Z2	2.28	2.52	5	85	5	600	1	100	1
CDZ55C2V7QR	Z3	2.57	2.84	5	83	5	500	1	75	1
CDZ55C3V0QR	Z4	2.85	3.15	5	95	5	500	1	50	1
CDZ55C3V3QR	Z5	3.14	3.47	5	95	5	500	1	25	1
CDZ55C3V6QR	Z6	3.42	3.78	5	95	5	500	1	15	1
CDZ55C3V9QR	Z7	3.71	4.10	5	95	5	500	1	10	1
CDZ55C4V3QR	Z8	4.09	4.52	5	95	5	500	1	5	1
CDZ55C4V7QR	Z9	4.47	4.94	5	78	5	500	1	5	2
CDZ55C5V1QR	ZA	4.85	5.36	5	60	5	480	1	0.1	0.8
CDZ55C5V6QR	ZB	5.32	5.88	5	40	5	400	1	0.1	1
CDZ55C6V2QR	ZC	5.89	6.51	5	10	5	200	1	0.1	2
CDZ55C6V8QR	ZE	6.46	7.14	5	8	5	150	1	0.1	3
CDZ55C7V5QR	ZF	7.13	7.88	5	7	5	50	1	0.1	5
CDZ55C8V2QR	ZG	7.79	8.61	5	7	5	50	1	0.1	6
CDZ55C9V1QR	ZH	8.65	9.56	5	10	5	50	1	0.1	7
CDZ55C10QR	ZJ	9.50	10.50	5	15	5	70	1	0.1	7.5
CDZ55C11QR	ZK	10.45	11.55	5	20	5	70	1	0.1	8.5
CDZ55C12QR	ZM	11.40	12.60	5	20	5	90	1	0.1	9
CDZ55C13QR	ZN	12.35	13.65	5	25	5	110	1	0.1	10
CDZ55C15QR	ZP	14.25	15.75	5	30	5	110	1	0.1	11
CDZ55C16QR	ZQ	15.20	16.80	5	40	5	170	1	0.1	12
CDZ55C18QR	ZR	17.10	18.90	5	50	5	170	1	0.1	14
CDZ55C20QR	ZS	19.00	21.00	5	50	5	220	1	0.1	15
CDZ55C22QR	ZT	20.90	23.10	5	55	5	220	1	0.1	17
CDZ55C24QR	ZU	22.80	25.20	5	80	5	220	1	0.1	18
CDZ55C27QR	ZV	25.65	28.35	5	80	5	250	1	0.1	20
CDZ55C30QR	ZW	28.50	31.50	5	80	5	250	1	0.1	23
CDZ55C33QR	ZX	31.35	34.65	5	80	5	250	1	0.1	25
CDZ55C36QR	ZY	34.20	37.80	5	90	5	250	1	0.1	27
CDZ55C39QR	ZZ	37.05	40.95	5	90	5	300	1	0.1	29



RATING AND CHARACTERISTIC CURVES

Fig.1 TEMPERATURE COEFFICIENTS

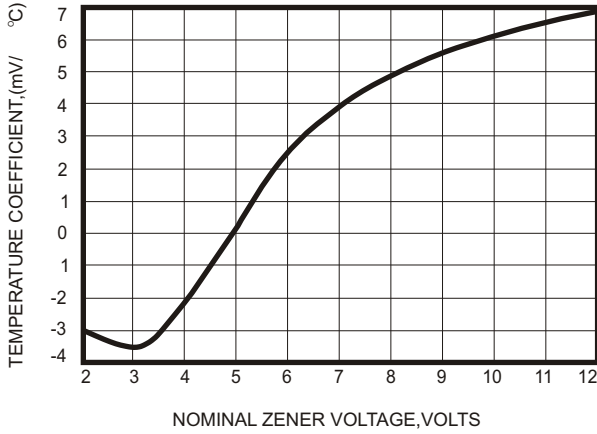


Fig.2 TEMPERATURE COEFFICIENTS

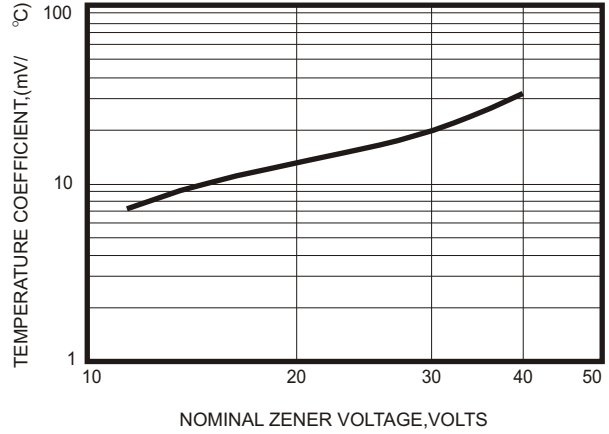


Fig.3 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

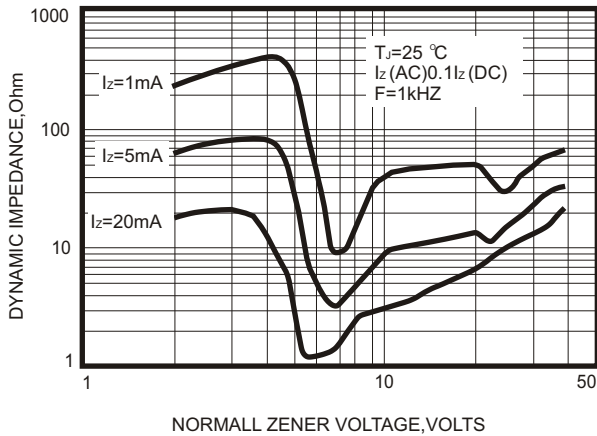


Fig.4 TYPICAL FORWARD VOLTAGE

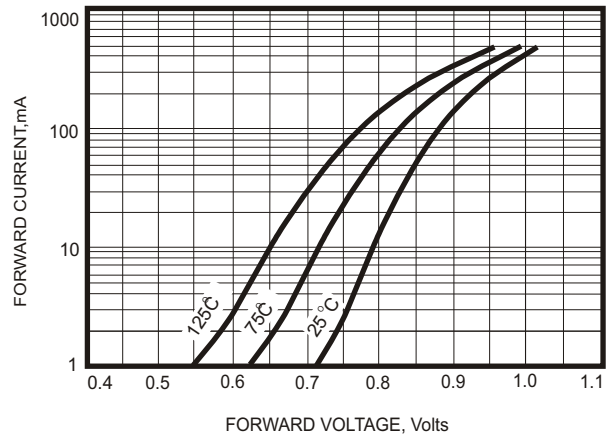


Fig.5 TYPICAL LEAKAGE CURRENT

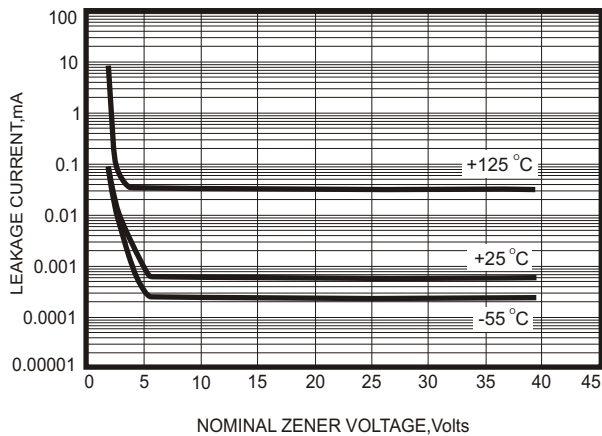
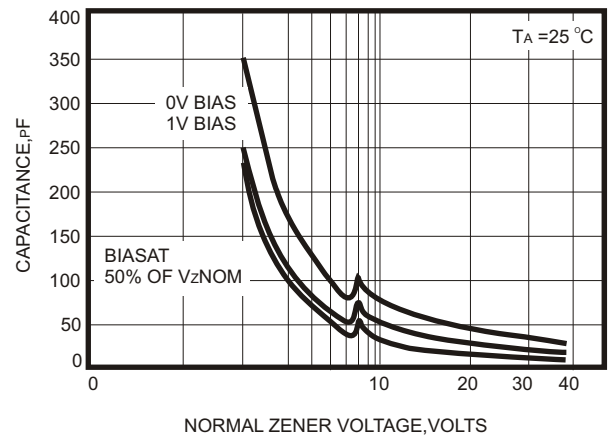


Fig.6 TYPICAL CAPACITANCE





RATING AND CHARACTERISTIC CURVES

Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

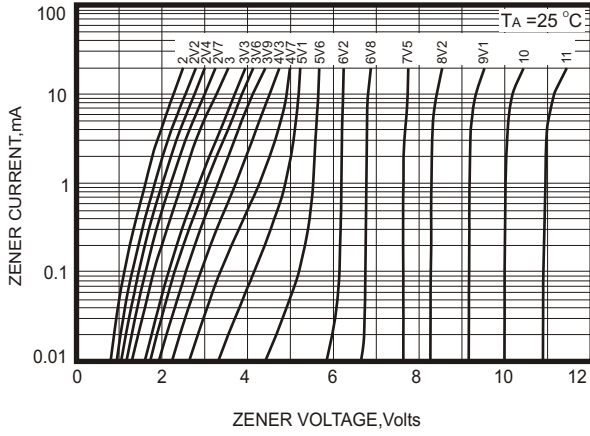


Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT

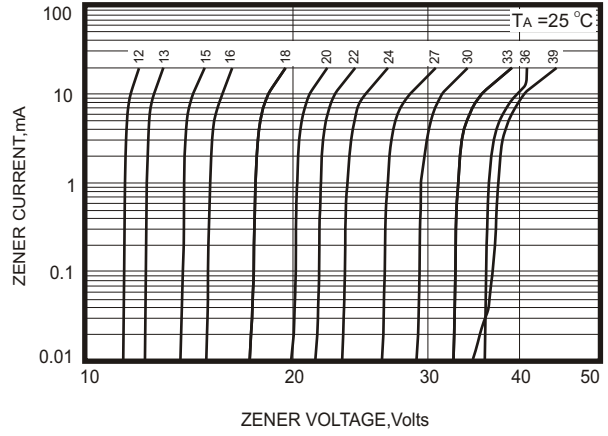


Fig.9 STEADY STATE POWER DERATING

