DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

CDZ55C2V0 THRU CDZ55C75

TECHNICAL SPECIFICATIONS OF SILICON PLANAR POWER ZENER DIODES

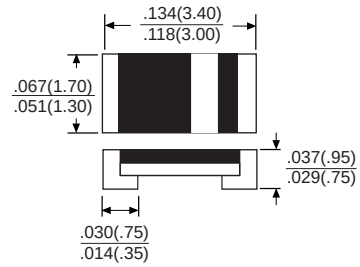
FEATURES

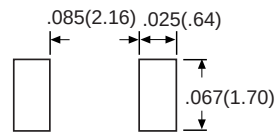
* Voltage Range:2.0V to 75V
* Also available various dimension included:
  0805C (CDZ55CxxS series)
  0603C (CDZ55CxxT series)

MECHANICAL DATA

* Case: 1206C
* Epoxy: UL 94V-0 rate flame retardant
* Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
* Mounting position: Any
* Weight: 0.01 grams Approx.

1206C





Mounting Pad Layout

Dimensions in inches(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

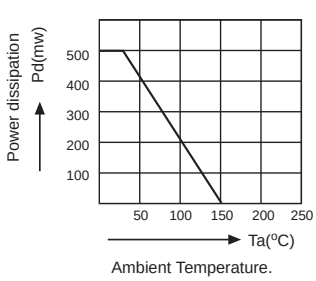
	SYMBOL	VALUE	UNITS
Zener Current see Table "Characterisitics"			
Power Dissipation at Tamb=25°C	Ptot	500 (1)	mW
Junction Temperature	Tj	150	°C
Storage Temperature Range	Tstg	-55 to + 175	°C
Thermal Resistance Junction to Ambient Air	RthA	-	°C/W Typ.
		-	Min.
		300 (1)	Max.
Forward Voltage at IF=200mA	VF	-	Volts Typ.
		-	Min.
		1.5	Max.
1)Valid Provided that leads are kept at ambient temperature.			

NOTE: Normal Tolerance ± 5%

RATING AND CHARACTERISTIC CURVES (CDZ55C SERIES)

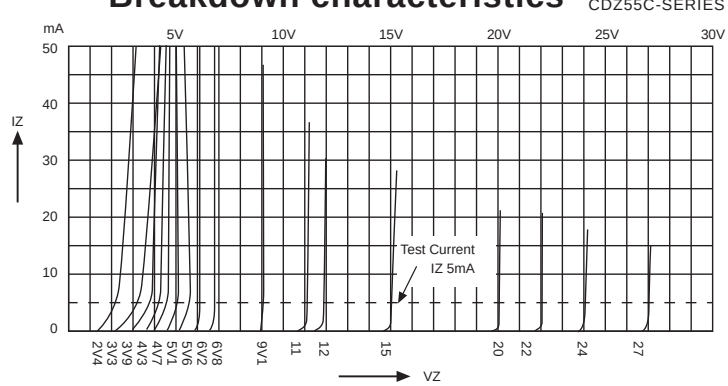
TYPE	Nominal Zener Voltage		Zener Test Current	Maximum Zener Impedance		I_{ZK}	Maximum Reverse Leakage Current	
	V_Z@I_{ZT}		I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}		I_R @ V_R	
	Min.	Max.	mA	Ohms	Ohms	mA	μA	Volts
CDZ55C2V0	1.90	2.10	5	85	600	1	100	1
CDZ55C2V2	2.09	2.31	5	85	600	1	75	1
CDZ55C2V4	2.28	2.52	5	85	600	1	50	1
CDZ55C2V7	2.57	2.84	5	85	600	1	10	1
CDZ55C3V0	2.85	3.15	5	85	600	1	4	1
CDZ55C3V3	3.14	3.47	5	85	600	1	2	1
CDZ55C3V6	3.42	3.78	5	85	600	1	2	1
CDZ55C3V9	3.71	4.10	5	85	600	1	2	1
CDZ55C4V3	4.09	4.52	5	80	600	1	1	1
CDZ55C4V7	4.47	4.61	5	70	600	1	0.5	1
CDZ55C5V1	4.85	5.36	5	50	550	1	0.1	1
CDZ55C5V6	5.32	5.88	5	30	450	1	0.1	1
CDZ55C6V2	5.89	6.51	5	10	200	1	0.1	2
CDZ55C6V8	6.46	7.14	5	8	150	1	0.1	3
CDZ55C7V5	7.13	7.88	5	7	50	1	0.1	5
CDZ55C8V2	7.79	8.61	5	7	50	1	0.1	6.2
CDZ55C9V1	8.65	9.56	5	10	50	1	0.1	6.8
CDZ55C10	9.50	10.50	5	15	70	1	0.1	7.5
CDZ55C11	10.45	11.55	5	20	70	1	0.1	8.2
CDZ55C12	11.40	12.60	5	20	90	1	0.1	9.1
CDZ55C13	12.35	13.65	5	26	110	1	0.1	10
CDZ55C15	14.25	15.75	5	30	110	1	0.1	11
CDZ55C16	15.20	16.80	5	40	170	1	0.1	12
CDZ55C18	17.10	18.90	5	50	170	1	0.1	13
CDZ55C20	19.00	21.00	5	55	220	1	0.1	15
CDZ55C22	20.90	23.10	5	55	220	1	0.1	16
CDZ55C24	22.80	25.20	5	80	220	1	0.1	18
CDZ55C27	25.65	28.35	5	80	220	1	0.1	20
CDZ55C30	28.50	31.50	5	80	220	1	0.1	22
CDZ55C33	31.35	34.65	5	80	220	1	0.1	24
CDZ55C36	34.20	37.80	5	80	220	1	0.1	27
CDZ55C39	37.05	40.95	2.5	90	500	0.5	0.1	29.3
CDZ55C43	40.85	45.15	2.5	90	600	0.5	0.1	32.3
CDZ55C47	44.65	49.35	2.5	110	700	0.5	0.1	35.3
CDZ55C51	48.45	53.55	2.5	125	700	0.5	0.1	38.3
CDZ55C56	53.20	58.80	2.5	135	1000	0.5	0.1	42
CDZ55C62	58.90	65.10	2.5	150	1000	0.5	0.1	46.5
CDZ55C68	64.60	71.40	2.5	200	1000	0.5	0.1	51
CDZ55C75	71.25	78.75	2.5	250	1500	0.5	0.1	56.3

changes in the power dissipation due to the ambient temperature.



Breakdown characteristics

CDZ55C-SERIES



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