DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

CDZ55C2V0S THRU CDZ55C75S

TECHNICAL SPECIFICATIONS OF SILICON PLANAR POWER ZENER DIODES

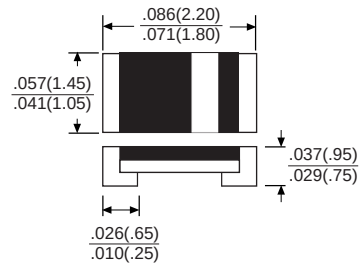
FEATURES

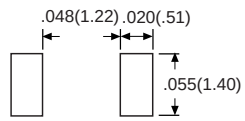
* Voltage Range:2.0V to 75V
* Also available various dimension included:
  1206C (CDZ55Cxx series)
  0603C (CDZ55CxxT series)

MECHANICAL DATA

* Case: 0805C
* Epoxy: UL 94V-0 rate flame retardant
* Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
* Mounting position: Any
* Weight: 0.006 grams Approx.

0805C





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.

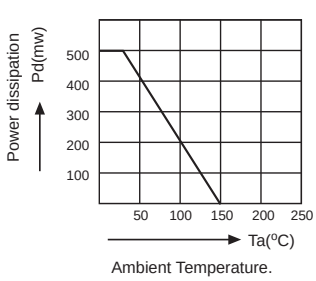
1)Valid Provided that leads are kept at ambient temperature.

NOTE: Normal Tolerance ± 5%

RATING AND CHARACTERISTIC CURVES (CDZ55CxxS SERIES)

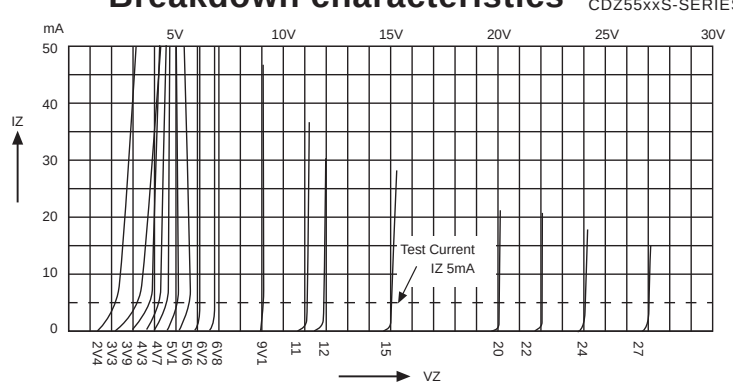
TYPE	Nominal Zener Voltage		Zener Test Current	Maximum Zener Impedance		I_{ZK}	Maximum Reverse Leakage Current	
	V_Z@I_{ZT}		I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}		I_R @ V_R	
	Min.	Max.	mA	Ohms	Ohms	mA	μA	Volts
CDZ55C2V0S	1.90	2.10	5	85	600	1	100	1
CDZ55C2V2S	2.09	2.31	5	85	600	1	75	1
CDZ55C2V4S	2.28	2.52	5	85	600	1	50	1
CDZ55C2V7S	2.57	2.84	5	85	600	1	10	1
CDZ55C3V0S	2.85	3.15	5	85	600	1	4	1
CDZ55C3V3S	3.14	3.47	5	85	600	1	2	1
CDZ55C3V6S	3.42	3.78	5	85	600	1	2	1
CDZ55C3V9S	3.71	4.10	5	85	600	1	2	1
CDZ55C4V3S	4.09	4.52	5	80	600	1	1	1
CDZ55C4V7S	4.47	4.61	5	70	600	1	0.5	1
CDZ55C5V1S	4.85	5.36	5	50	550	1	0.1	1
CDZ55C5V6S	5.32	5.88	5	30	450	1	0.1	1
CDZ55C6V2S	5.89	6.51	5	10	200	1	0.1	2
CDZ55C6V8S	6.46	7.14	5	8	150	1	0.1	3
CDZ55C7V5S	7.13	7.88	5	7	50	1	0.1	5
CDZ55C8V2S	7.79	8.61	5	7	50	1	0.1	6.2
CDZ55C9V1S	8.65	9.56	5	10	50	1	0.1	6.8
CDZ55C10S	9.50	10.50	5	15	70	1	0.1	7.5
CDZ55C11S	10.45	11.55	5	20	70	1	0.1	8.2
CDZ55C12S	11.40	12.60	5	20	90	1	0.1	9.1
CDZ55C13S	12.35	13.65	5	26	110	1	0.1	10
CDZ55C15S	14.25	15.75	5	30	110	1	0.1	11
CDZ55C16S	15.20	16.80	5	40	170	1	0.1	12
CDZ55C18S	17.10	18.90	5	50	170	1	0.1	13
CDZ55C20S	19.00	21.00	5	55	220	1	0.1	15
CDZ55C22S	20.90	23.10	5	55	220	1	0.1	16
CDZ55C24S	22.80	25.20	5	80	220	1	0.1	18
CDZ55C27S	25.65	28.35	5	80	220	1	0.1	20
CDZ55C30S	28.50	31.50	5	80	220	1	0.1	22
CDZ55C33S	31.35	34.65	5	80	220	1	0.1	24
CDZ55C36S	34.20	37.80	5	80	220	1	0.1	27
CDZ55C39S	37.05	40.95	2.5	90	500	0.5	0.1	29.3
CDZ55C43S	40.85	45.15	2.5	90	600	0.5	0.1	32.3
CDZ55C47S	44.65	49.35	2.5	110	700	0.5	0.1	35.3
CDZ55C51S	48.45	53.55	2.5	125	700	0.5	0.1	38.3
CDZ55C56S	53.20	58.80	2.5	135	1000	0.5	0.1	42
CDZ55C62S	58.90	65.10	2.5	150	1000	0.5	0.1	46.5
CDZ55C68S	64.60	71.40	2.5	200	1000	0.5	0.1	51
CDZ55C75S	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

CDZ55xxS-SERIES



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