DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

CDZ55C2V0S THRU CDZ55C36S

TECHNICAL SPECIFICATIONS OF SILICON PLANAR POWER ZENER DIODES

FEATURES

* Voltage Range:2.0V to 36V
* Also available various dimension included:
  1206C (CDZ55Cxx series)
  0603C (CDZ55CxxT series)

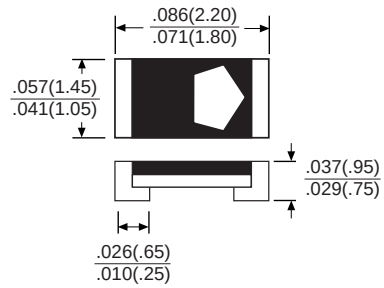
MECHANICAL DATA

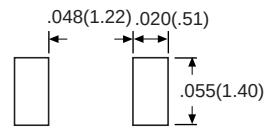
* Case: 0805C
* Epoxy: UL 94V-0 rate flame retardant
* Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
* Mounting position: Any
* Weight: 0.006 grams Approx.

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%.

0805C





Mounting Pad Layout

Dimensions in inches(millimeters)

	SYMBOL	VALUE	UNITS
Zener Current see Table "Characterisitics"			
Power Dissipation at Tamb=25°C	Ptot	500(1)	mW
Junction Temperature	Tj	175	°C
Storage Temperature Range	Tstg	-55 to + 175	°C
Thermal Resistance Junction to Ambient Air	RthA		K/mW
		-	Typ.
		-	Min.
		0.3(1)	Max.
Forward Voltage at IF=200mA	VF		Volts
		-	Typ.
		-	Min.
		1.5	Max.

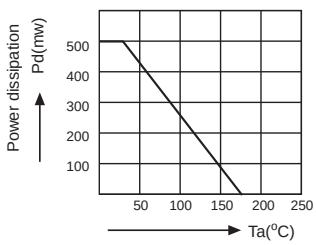
1)Valid Provided that leads are kept at ambient temperature.

NOTE: Standard Zener Voltage Tolerance ± 5%

RATING AND CHARACTERISTIC CURVES (CDZ55CxxS SERIES)

TYPE	Nominal Zener Voltage $V_Z@I_{ZT}$		Zener Test Current I_{ZT}	Maximum Zener Impedance		I_{ZK}	Maximum Reverse Leakage Current	
				$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$		I_R @ V_R	
	Volts		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	2.56	5	85	600	1	50	1
CDZ55C2V7S	2.5	2.9	5	85	600	1	10	1
CDZ55C3V0S	2.8	3.2	5	85	600	1	4	1
CDZ55C3V3S	3.1	3.5	5	85	600	1	2	1
CDZ55C3V6S	3.4	3.8	5	85	600	1	2	1
CDZ55C3V9S	3.7	4.1	5	85	600	1	2	1
CDZ55C4V3S	4.0	4.6	5	75	600	1	1	1
CDZ55C4V7S	4.4	5.0	5	60	600	1	0.5	1
CDZ55C5V1S	4.8	5.4	5	35	550	1	0.1	1
CDZ55C5V6S	5.2	6.0	5	25	450	1	0.1	1
CDZ55C6V2S	5.8	6.6	5	10	200	1	0.1	2
CDZ55C6V8S	6.4	7.2	5	8	150	1	0.1	3
CDZ55C7V5S	7.0	7.9	5	7	50	1	0.1	5
CDZ55C8V2S	7.7	8.7	5	7	50	1	0.1	6.2
CDZ55C9V1S	8.5	9.6	5	10	50	1	0.1	6.8
CDZ55C10S	9.4	10.6	5	15	70	1	0.1	7.5
CDZ55C11S	10.4	11.6	5	20	70	1	0.1	8.2
CDZ55C12S	11.4	12.7	5	20	90	1	0.1	9.1
CDZ55C13S	12.4	14.1	5	26	110	1	0.1	10
CDZ55C15S	13.8	15.6	5	30	110	1	0.1	11
CDZ55C16S	15.3	17.1	5	40	170	1	0.1	12
CDZ55C18S	16.8	19.1	5	50	170	1	0.1	13
CDZ55C20S	18.8	21.2	5	55	220	1	0.1	15
CDZ55C22S	20.8	23.3	5	55	220	1	0.1	16
CDZ55C24S	22.8	25.6	5	80	220	1	0.1	18
CDZ55C27S	25.1	28.9	5	80	220	1	0.1	20
CDZ55C30S	28	32	5	80	220	1	0.1	22
CDZ55C33S	31	35	5	80	220	1	0.1	24
CDZ55C36S	34	38	5	80	220	1	0.1	27

changes in the power dissipation
due to the ambient temperature.



Ambient Temperature.

Breakdown characteristics

CDZ55xxS-SERIES

