

- ZENER DIODE CHIPS
- ALL JUNCTIONS COMPLETELY PROTECTED WITH SILICON DIOXIDE
- COMPATIBLE WITH ALL WIRE BONDING DIE ATTACH TECHNIQUES
- 1.5 WATT CAPABILITY WITH PROPER HEAT SINKING

CD6485  
thru  
CD6491

### MAXIMUM RATINGS

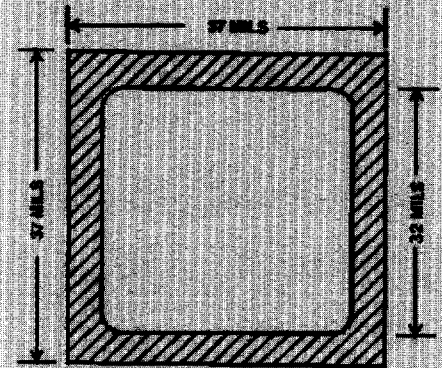
Operating Temperature: -65°C to +175°C  
Storage Temperature: -65°C to +175°C  
Forward Voltage @ 200mA = 1.5 volts maximum

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NO.	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ (Note 1)	ZENER TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE $Z_{ZT}$ (Note 2)	MAXIMUM REVERSE LEAKAGE CURRENT $I_R @ V_R$		MAXIMUM KNEE IMPEDANCE $Z_{ZK} @ I_{ZK}$ (Note 2)	
	VOLTS	mA	OHMS	$\mu A$	VOLTS	OHMS	mA
CD6485	3.3	76	10	50	1.0	400	1.0
CD6486	3.6	69	10	50	1.0	400	1.0
CD6487	3.9	64	9	35	1.0	400	1.0
CD6488	4.3	58	9	5	1.0	400	1.0
CD6489	4.7	53	8	5	1.0	500	1.0
CD6490	5.1	49	7	1	1.0	500	1.0
CD6491	5.6	45	5	0.5	2.0	600	1.0

**NOTE 1** The CDI type numbers shown above have a standard tolerance of  $\pm 5\%$  of the nominal Zener voltage. Zener voltage is read using a pulse measurement, 10 milliseconds maximum.

**NOTE 2** Zener impedance is derived by superimposing on  $I_{ZT}$  or  $I_{ZK}$ , a 60Hz rms a.c. current equal to 10% of  $I_{ZT}$  or  $I_{ZK}$ .



BACKSIDE IS CATHODE  
FIGURE 1

### DESIGN DATA

**METALLIZATION:**

Top: (Anode)..... Al  
Back: (Cathode)..... Au

AL THICKNESS.....25,000 Å Min

GOLD THICKNESS.....4,000 Å Min

CHIP THICKNESS.....1...0 MILS

**TOLERANCES: ALL**  
Dimensions  $\pm 2$  mils

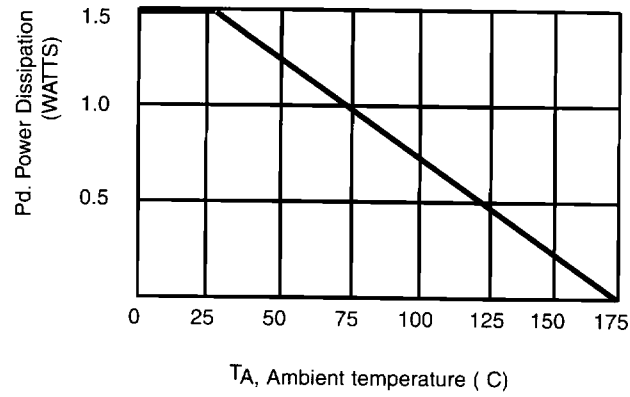


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# CD6485 thru CD6491

FIGURE 2



POWER DERATING CURVE

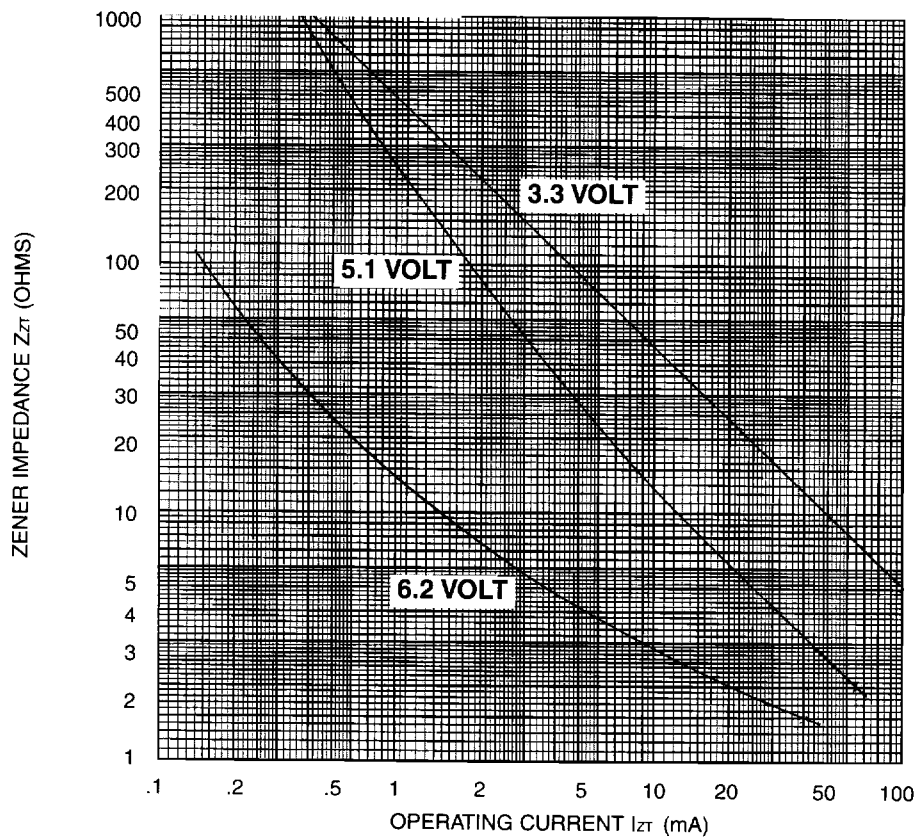


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT