# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



- CURRENT REGULATOR DIODES
- LEADLESS PACKAGE FOR SURFACE MOUNT
- CONSTANT CURRENT OVER WIDE VOLTAGE RANGE
- HIGH SOURCE IMPEDANCE
- METALLURGICALLY BONDED

#### **MAXIMUM RATINGS**

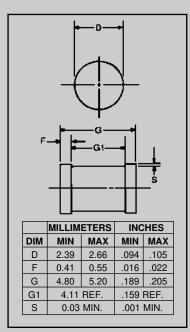
Operating Temperature: -65°C to +175°C Storage Temperature: -65°C to +175°C DC Power Dissipation: 500 mW @ +50°C Power Derating: 4 mW / °C above +50°C

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

TYPE NUMBER	REGULATOR CURRENT I p (mA) @ VS = 25V (Note 1)			MINIMUM DYNAMIC IMPEDANCE @VS = 25V ZS (K )	MINIMUM KNEE IMPEDANCE @V <sub>K</sub> = 6.0 V Z <sub>K</sub> (K)	MAXIMUM LIMITING VOLTAGE @ IL = 0.8 l p (min)	PEAK OPERATING VOLTAGE
	NOM	MIN	MAX	(Note 2)	(Note 3)	VL (VOLTS)	VOLTS
CDLL250	5.10	4.59	5.61	100	4.0	3.67	80
CDLL251	5.60	5.04	6.16	90	4.0	4.03	80
CDLL252	6.20	5.58	6.82	80	3.0	4.46	70
CDLL253	6.80	6.12	7.48	70	2.0	4.90	70
CDLL254	7.50	6.75	8.25	50	1.5	5.40	60
CDLL255	8.20	7.38	9.02	30	1.5	5.90	60
CDLL256	9.10	8.19	10.01	20	1.0	6.55	50
CDLL257	10.00	9.00	11.10	10	1.0	7.20	50

- NOTE 1 Pulse measurement @ 1% duty cycle, 10 milliseconds maximum.
- NOTE 2 Z<sub>S</sub> is derived by superimposing A 90Hz RMS signal equal to 10% of V<sub>S</sub> on V<sub>S</sub>
- NOTE 3  $Z_{K}$  is derived by superimposing A 90Hz RMS signal equal to 10% of  $V_{K}$  on  $V_{K}$

### **CDLL250** thru **CDLL257**



#### **FIGURE 1**

## **DESIGN DATA**

CASE: DO-213AB, Hermetically sealed glass case. (MELF, LL41)

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: (R<sub>QJEC</sub>): 100 °C/W maximum at L = 0 inch

THERMAL IMPEDANCE: (ZQJX): 25 °C/W maximum

POLARITY: Diode to be operated with the band (cathode) end negative.

#### MOUNTING SURFACE SELECTION:

The Axial Coefficient of Expansion (COE) Of this Device is Approximately +6PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.



6 LAKE STREET, LAWRENCE, MASSACHUSETTS 01841 PHONE (978) 620-2600 WEBSITE: http://www.microsemi.com

FAX (978) 689-0803