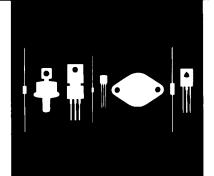
Semiconductor Corp.

Central Semiconductor Corp. Central <sup>™</sup> Semiconductor Corp.

145 Adams Avenue Hauppauge, New York 11788



CMCL1300 THRU CMCL1304

**CURRENT LIMITING DIODE** 

**JEDEC DO-35 CASE** 

## **FEATURES**

- LOW COST
- HIGH RELIABILITY
- SMALLER CASE SIZE THAN COMPETITION
- SPECIAL SELECTIONS AVAILABLE
- SUPERIOR LOT TO LOT CONSISTENCY
- SURFACE MOUNT DEVICES AVAILABLE

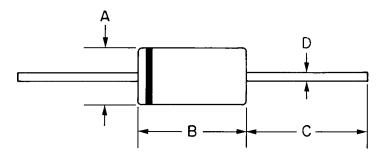
## **DESCRIPTION**

The CENTRAL SEMICONDUCTOR CMCL1300 series types are silicon field effect current regulator diodes designed for applications requiring a constant current over a wide voltage range. These devices are manufactured in the cost effective DO-35 double plug case which provides many benefits to the user including space savings and improved thermal characteristics. Special selections of Ip (regulator current) are available for critical applications. This series is a direct replacement for MCL1300 through MCL1304 types, respectively. Lower cost units are available in the CCL0035 series.

MAXIMUM RATINGS ( $T_L = 75^{\circ}$ C)	SYMBOL		UNIT
Peak Operating Voltage	POV	100	V
Power Dissipation	$P_{D}$	600	mW
Operating and Storage Junction Temperature	TJ, TSTG	-65 TO +200	°C

## ELECTRICAL CHARACTERISTICS (TA = 25°C)

TYPE NO.	REGULATOR CURRENT Ip @ V <sub>T</sub> = 25V		DYNAMIC IMPEDANCE	KNEE IMPEDANCE	LIMITING VOLTAGE	
			Ip @ V <sub>T</sub> = 2	Z <sub>T</sub> @ V <sub>T</sub> = 25V	Z <sub>K</sub> @ V <sub>K</sub> = 6.0V	VL @ IL = 0.8 IP MIN
	mA		Μ Ω	ΜΩ	V	
	MIN	NOM	MAX	MIN	MIN	MAX
CMCL1300	0.20	0.50	0.80	4.00	0.50	1.0
CMCL1301	0.40	1.00	1.60	0.80	0.20	1.5
CMCL1302	1.40	2.00	2.60	0.40	0.10	2.0
CMCL1303	2.40	3.00	3.60	0.30	0.05	2.0
CMCL1304	3.40	4.00	4.60	0.25	0.025	2.5



	INCHES		MILLIMETERS	
DIM	MIN	MAX	MIN	MAX
Α	.060	.080	1.52	2.03
В	.140	.160	3.60	4.10
С	1.0	_	25.4	
D	.018	.022	0.46	0.56