

CCLM0035
THRU
CCLM5750

**SURFACE MOUNT SILICON
CURRENT LIMITING DIODE**



SOD-80 CASE

Central™
Semiconductor Corp.

FEATURES:

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

**MARKING CODE: SEE MARKING CODE
TABLE ON FOLLOWING PAGE**

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CCLM0035 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 SOD-80 double plug case which provides many benefits to the user including space savings and improved thermal characteristics. Special selections of I_P (regulator current) are available for critical applications.

MAXIMUM RATINGS: ($T_L=75^\circ\text{C}$)

Peak Operating Voltage

Power Dissipation

Operating and Storage Junction Temperature

SYMBOL

P_{OV}

P_D

T_J, T_{stg}

100

800

-65 to +200

UNITS

V

mW

$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$)

TYPE NO.	REGULATOR(1) CURRENT			DYNAMIC IMPEDANCE	KNEE IMPEDANCE	LIMITING VOLTAGE	TEMPERATURE COEFFICIENT
	$I_P@V_T=25\text{V}$			$Z_T@V_T=25\text{V}$	$Z_K@V_K=6.0\text{V}$	$V_L@I_L=0.8 I_P \text{ MIN}$	TC^*
	mA			M Ω	M Ω	VOLTS	%/ $^\circ\text{C}$
	MIN	NOM	MAX	MIN	MIN	MAX	
CCLM0035	0.010	0.035	0.060	8.0	4.0	0.4	+2.10 TO +0.10
CCLM0130	0.050	0.130	0.210	6.0	2.0	0.6	+2.10 TO +0.10
CCLM0300	0.200	0.310	0.420	4.0	1.0	0.8	+0.40 TO -0.20
CCLM0500	0.400	0.515	0.630	2.0	0.5	1.1	+0.15 TO -0.25
CCLM0750	0.600	0.760	0.920	1.0	0.2	1.4	0.0 TO -0.32
CCLM1000	0.880	1.100	1.320	0.65	0.1	1.7	-0.10 TO -0.37
CCLM1500	1.280	1.500	1.720	0.45	0.07	2.0	-0.13 TO -0.40
CCLM2000	1.680	2.000	2.320	0.35	0.05	2.3	-0.15 TO -0.42
CCLM2700	2.280	2.690	3.100	0.30	0.03	2.7	-0.18 TO -0.45
CCLM3500	3.000	3.550	4.100	0.25	0.02	3.2	-0.20 TO -0.47
CCLM4500	3.900	4.500	5.100	0.20	0.01	3.7	-0.22 TO -0.50
CCLM5750	5.000	5.750	6.500	0.05	0.005	4.5	-0.25 TO -0.53

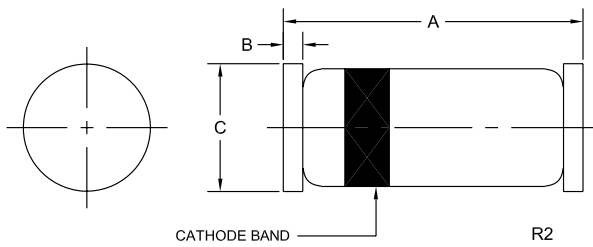
*The Temperature Coefficient is measured between the following points: +25 $^\circ\text{C}$, +50 $^\circ\text{C}$

(1) PULSED METHOD. $\left(\text{PULSE WIDTH (ms)} = \frac{27.5}{I_P \text{ NOM (mA)}} \right)$

R5 (22-August 2006)

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SOD-80 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.130	0.146	3.30	3.71
B	0.014		0.35	
C (DIA)	0.049	0.067	1.25	1.70

SOD-80 (REV:R2)

MARKING CODES:

CENTRAL TYPE NO.	BAND 1*	BAND 2	BAND 3
CCLM0035	BLACK	LIGHT BLUE	WHITE
CCLM0130	BLACK	LIGHT BLUE	PINK
CCLM0300	BLACK	LIGHT BLUE	ORANGE
CCLM0500	BLACK	LIGHT BLUE	GREEN
CCLM0750	BLACK	LIGHT BLUE	DARK BLUE
CCLM1000	BLACK	GREEN	PINK
CCLM1500	BLACK	GREEN	ORANGE
CCLM2000	BLACK	GREEN	GREEN
CCLM2700	BLACK	GREEN	LIGHT BLUE
CCLM3500	BLACK	GREEN	DARK BLUE
CCLM4500	BLACK	GREEN	VIOLET
CCLM5750	BLACK	GREEN	WHITE

* Cathode Band

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