

CCLHM080  
THRU  
CCLHM150

**SURFACE MOUNT  
HIGH CURRENT SILICON  
CURRENT LIMITING DIODE**



SOD-80 CASE



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CCLHM080 series types are high current 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 saving and improved thermal characteristics. Special selections of  $I_P$  (regulator current) are available for critical applications.

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

**FEATURES:**

- Low Cost
- High Reliability
- Smaller Case Size than Competition
- Special Selections Available
- Superior Lot to Lot Consistency
- Leaded Devices Available

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

Peak Operating Voltage

Power Dissipation

Operating and Storage Junction Temperature

**SYMBOL**

$P_{OV}$

$P_D$

$T_J, T_{stg}$

50

800

-65 to +200

**UNITS**

V

mW

$^\circ\text{C}$

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

Type	Regulator Current (Note 1)			Minimum Dynamic Impedance	Minimum Knee Impedance	Maximum Limiting Voltage	Temperature Coefficient (Note 2)
	$I_P @ V_T=25V$			$Z_T @ V_T=25V$	$Z_K @ V_K=6.0V$	$V_L @ I_L=0.8 \times I_P \text{ MIN}$	TC
	MIN (mA)	NOM (mA)	MAX (mA)	M $\Omega$	k $\Omega$	V	%/ $^\circ\text{C}$
CCLHM080	6.56	8.2	9.84	0.32	15	3.1	-0.25 to -0.45
CCLHM100	8.0	10.0	12.0	0.17	6.0	3.5	-0.25 to -0.45
CCLHM120	9.6	12.0	14.4	0.08	3.0	3.8	-0.25 to -0.45
CCLHM150	12.0	15.0	18.0	0.03	2.0	4.3	-0.25 to -0.45

Notes:

1) Pulsed Method: Pulse Width (ms) = 27.5 divided by  $I_P$  NOM (mA)

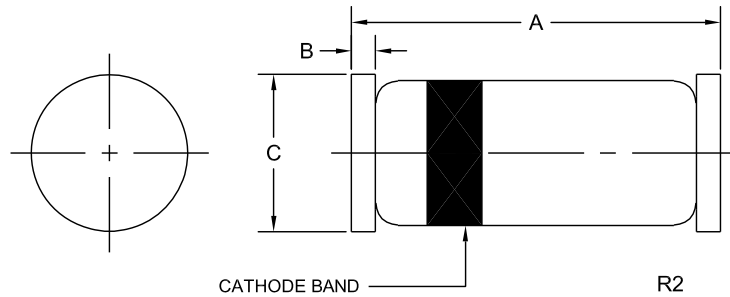
2) The Temperature Coefficient is measured between +25 $^\circ\text{C}$  and +50 $^\circ\text{C}$ .

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SOD-80 CASE - MECHANICAL OUTLINE



DIMENSIONS				
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			
TYPE	BAND 1*	BAND 2	BAND 3
CCLHM080	BLACK	GREEN	YELLOW
CCLHM100	BLACK	ORANGE	PINK
CCLHM120	BLACK	ORANGE	WHITE
CCLHM150	BLACK	ORANGE	LIGHT BLUE

\* Cathode Band

R6 (4-January 2010)