

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

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Manufacturers of World Class Discrete Semiconductors

www.centrasemi.com

CCLH080 THRU CCLH150

HIGH CURRENT  
CURRENT LIMITING DIODE

JEDEC DO-35 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR CCLH080 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 DO-35 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.

MAXIMUM RATINGS ( $T_L=75^\circ\text{C}$  unless otherwise noted)

	SYMBOL		UNITS
Peak Operating Voltage	POV	50	V
Power Dissipation	$P_D$	600	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +200	$^\circ\text{C}$

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

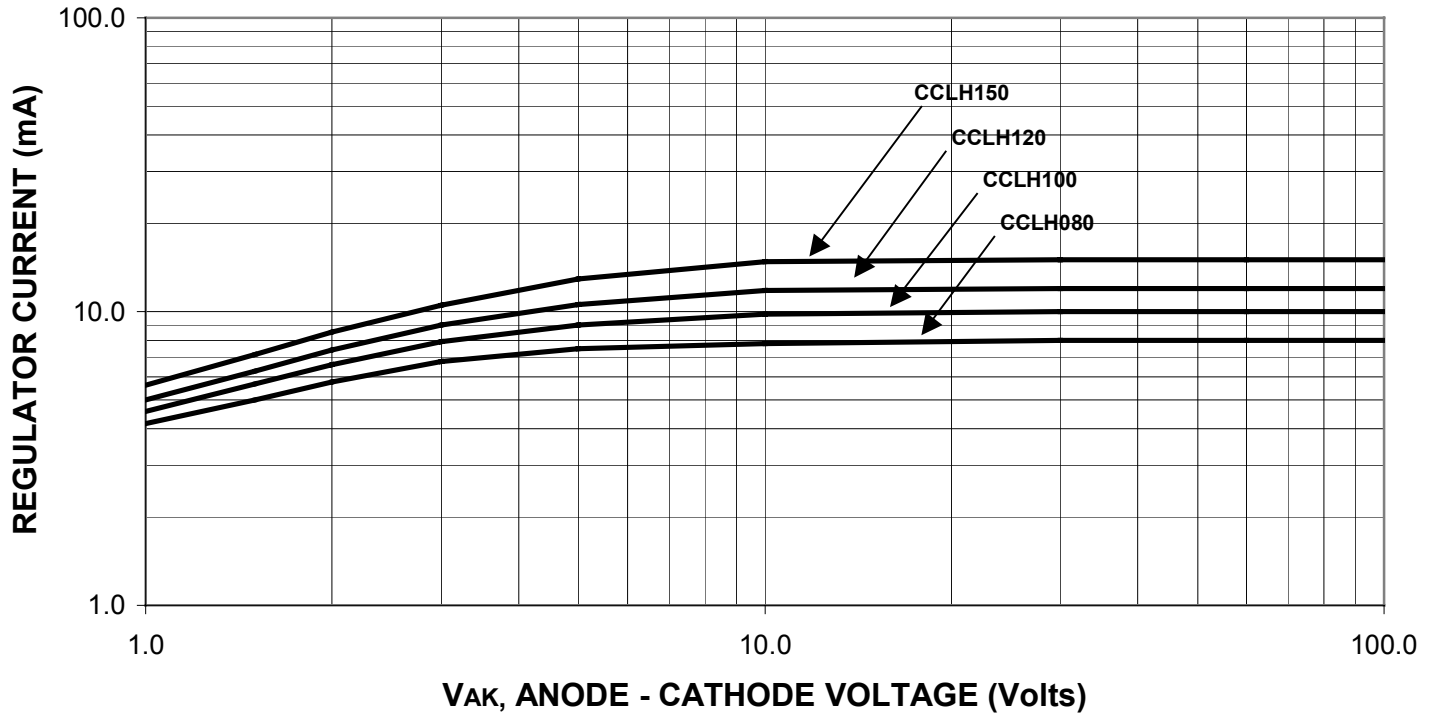
TYPE NO.	REGULATOR CURRENT(1)			DYNAMIC IMPEDANCE	KNEE IMPEDANCE	LIMITING VOLTAGE	TEMPERATURE COEFFICIENT
	$I_P @ V_T=25\text{V}$			$Z_T @ V_T=25\text{V}$	$Z_K @ V_K=6.0\text{V}$	$V_L @ I_L=0.8 I_P \text{ MIN}$	TC*
	mA			M $\Omega$	k $\Omega$	V	%/ $^\circ\text{C}$
	MIN	NOM	MAX	MIN	MIN	MAX	
CCLH080	6.56	8.20	9.84	0.32	15	3.1	-0.25 TO -0.45
CCLH100	8.00	10.0	12.0	0.17	6.0	3.5	-0.25 TO -0.45
CCLH120	9.60	12.0	14.4	0.08	3.0	3.8	-0.25 TO -0.45
CCLH150	12.0	15.0	18.0	0.03	2.0	4.3	-0.25 TO -0.45

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

(1) PULSED METHOD PULSE WIDTH (ms) =  $27.5 / I_P \text{ NOM (mA)}$

(SEE REVERSE SIDE)

TYPICAL REGULATOR CURRENT VS. VOLTAGE



DO-35 PACKAGE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
A	0.018	0.022	0.46	0.56
B	0.120	0.200	3.05	5.08
C	0.060	0.090	1.52	2.29
D	1.000	-	25.40	-

DO-35 (REV: R1)

R1

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