

CentralTM Semiconductor Corp.

145 Adams Ave., Hauppauge, NY 11788 USA
Phone (516) 435-1110 FAX (516) 435-1824

Manufacturers of World Class Discrete Semiconductors

CCLH080 THRU CCLH150

HIGH CURRENT
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 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 ($T_L = 75^\circ\text{C}$)	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	$^\circ\text{C}$

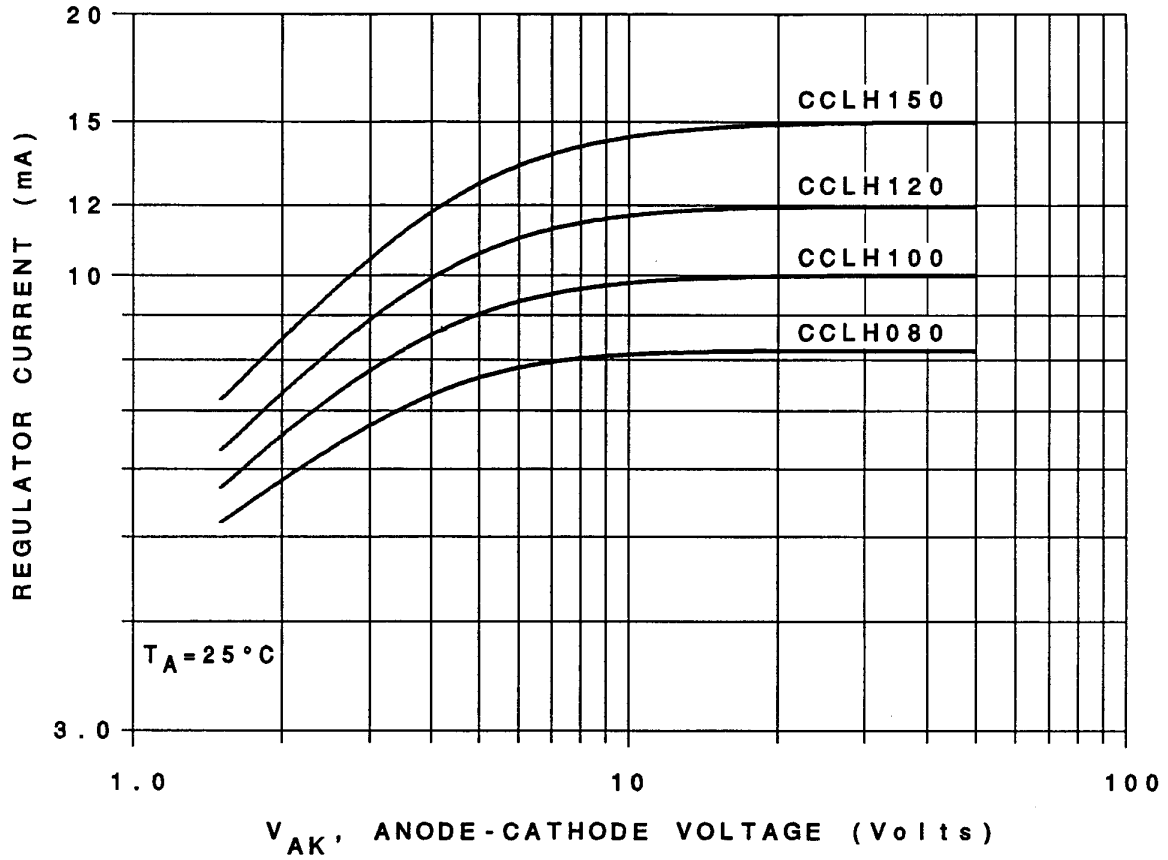
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

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			$\text{M}\Omega$	$\text{k}\Omega$	VOLTS	$\%/^\circ\text{C}$
	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: $+25^\circ\text{C}$, $+50^\circ\text{C}$

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

TYPICAL REGULATOR CURRENT VS. VOLTAGE



MECHANICAL OUTLINE

ALL DIMENSIONS
IN INCHES (mm).

