



High Current Current Limiting Diode

CCLH080 Thru CCLH150

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 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

SYMBOL

POV

50

UNITS

V

Power Dissipation

P_D

600

mW

Operating and Storage Junction Temperature

T_J, T_{stg}

-65 to +200

$^\circ\text{C}$

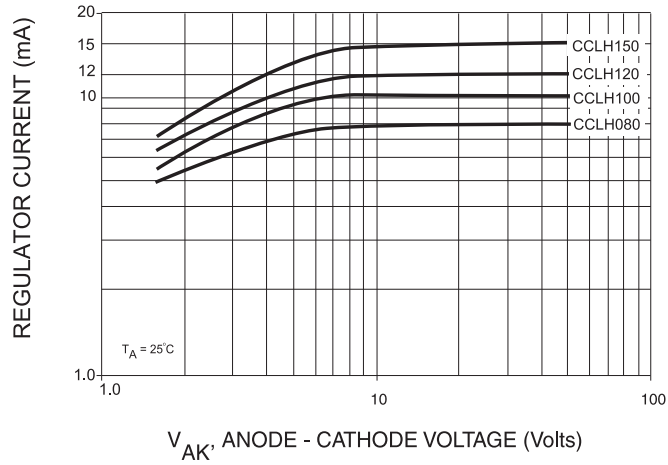
ELECTRICAL CHARACTERISTICS: ($T_A = 25^\circ\text{C}$)

TYPE NO.	REGULATOR CURRENT ⁽¹⁾			DYNAMIC IMPEDANCE	KNEE IMPEDANCE	LIMITING VOLTAGE	TEMPERATURE COEFFICIENT
	$I_P @ V_T = 25V$			$Z_T @ V_T = 25V$	$Z_K @ V_K = 6.0V$	$V_L @ I_L = 0.8 I_P \text{ MIN}$	TC*
	mA			M Ω	k Ω	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

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

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

Typical Regulator Current vs. Voltage



Typical Regulator Current vs. Temperature

