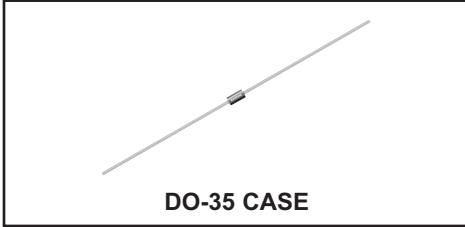


CCLH080 CCLH120  
CCLH100 CCLH150

**SILICON  
CURRENT LIMITING DIODE**



[www.centrasemi.com](http://www.centrasemi.com)



**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.

**MARKING: FULL PART NUMBER**

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

Peak Operating Voltage  
Power Dissipation  
Operating and Storage Junction Temperature

**SYMBOL**

$P_{OV}$  50  
 $P_D$  600  
 $T_J, T_{stg}$  -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)
	$I_P @ V_T=25\text{V}$						
	MIN mA	NOM mA	MAX mA	$Z_T @ V_T=25\text{V}$ k $\Omega$	$Z_K @ V_K=6.0\text{V}$ k $\Omega$	$V_L @ I_L=0.8 \times I_P$ MIN V	$T_C$ %/ $^\circ\text{C}$
CCLH080	6.56	8.20	9.84	320	15	3.1	-0.25 to -0.45
CCLH100	8.00	10.0	12.0	170	6.0	3.5	-0.25 to -0.45
CCLH120	9.60	12.0	14.4	80	3.0	3.8	-0.25 to -0.45
CCLH150	12.0	15.0	18.0	30	2.0	4.3	-0.25 to -0.45

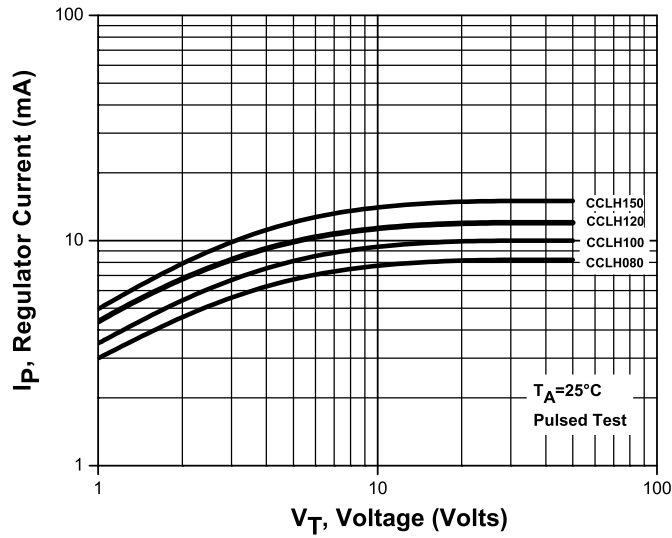
Notes: (1) Pulsed Method: Pulse Width (ms) = 27.5 divided by  $I_P$  NOM (mA)  
(2) The Temperature Coefficient is measured between +25 $^\circ\text{C}$  and +50 $^\circ\text{C}$ .

CCLH080 CCLH120  
 CCLH100 CCLH150

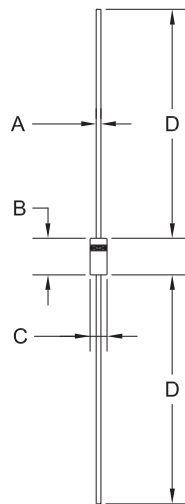
SILICON  
 CURRENT LIMITING DIODE



Typical Regulator Current vs Voltage



DO-35 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
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)

MARKING: FULL PART NUMBER

R1

R2 (31-August 2012)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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