

CCLH080 CCLH120
CCLH100 CCLH150

**SILICON
CURRENT LIMITING DIODE**

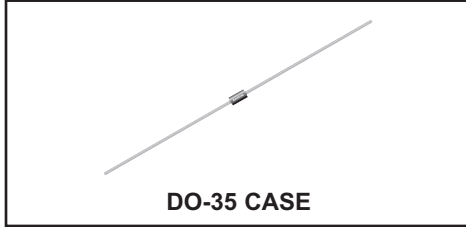


www.centrasemi.com

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



DO-35 CASE

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 Ω	$Z_K @ V_K=6.0\text{V}$ k Ω	$V_L @ I_L=0.8 \times I_P \text{ MIN}$ 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

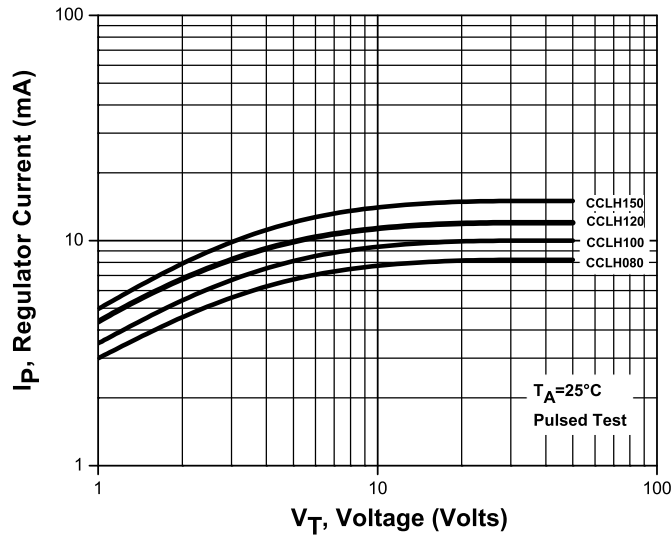
Notes: (1) Pulsed Method: Pulse Width (ms) = 27.5 divided by $I_P \text{ NOM}$ (mA)
(2) The Temperature Coefficient is measured between + 25 $^\circ\text{C}$ and +50 $^\circ\text{C}$.

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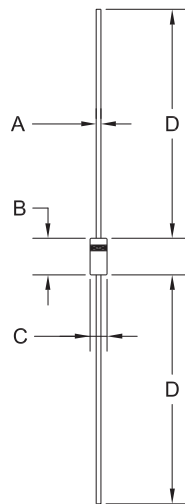
SILICON
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Typical Regulator Current vs Voltage



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



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

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).

CONTACT US

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