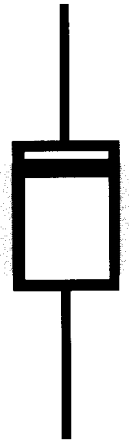


Current Limiting Diode

CCL0035 Thru CCL5750 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 CCL0035 series types are 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. This series is the most cost-effective of the current limiting diode product family.

MAXIMUM RATINGS (T_L = 75°C)	SYMBOL		UNIT
Peak Operating Voltage	POV	100	V
Power Dissipation	P_D	600	mW
Operating and Storage Junction Temperature	T_J,T_{STG}	-65 to +200	°C

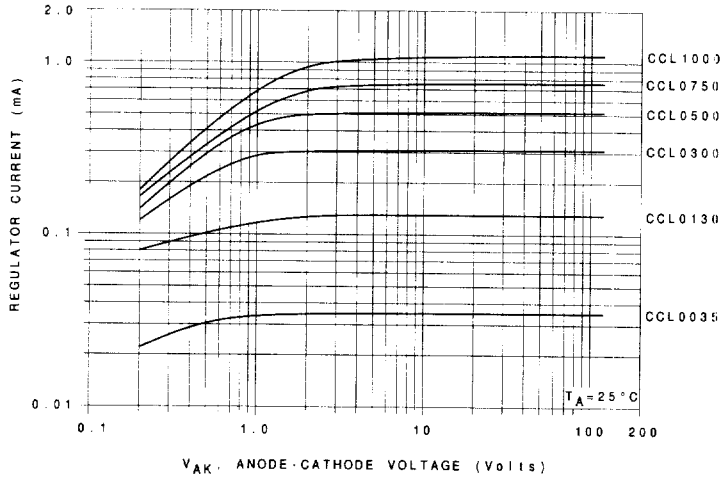
ELECTRICAL CHARACTERISTICS (T_A = 25°C)

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 MIN	TC*
	mA			MΩ	MΩ	V	%/°C
	MIN	NOM	MAX	MIN	MIN	MAX	
CCL0035	0.010	0.035	0.060	8.0	4.0	0.4	+2.10 to +0.10
CCL0130	0.050	0.130	0.210	6.0	2.0	0.6	+2.10 to +0.10
CCL0300	0.200	0.310	0.420	4.0	1.0	0.8	+0.40 to -0.20
CCL0500	0.400	0.515	0.630	2.0	0.5	1.1	+0.15 to -0.25
CCL0750	0.600	0.760	0.920	1.0	0.2	1.4	0.0 to -0.32
CCL1000	0.880	1.100	1.320	0.65	0.1	1.7	-0.10 to -0.37
CCL1500	1.280	1.500	1.720	0.45	0.07	2.0	-0.13 to -0.40
CCL2000	1.680	2.000	2.320	0.35	0.05	2.3	-0.15 to -0.42
CCL2700	2.280	2.690	3.100	0.30	0.03	2.7	-0.18 to -0.45
CCL3500	3.000	3.550	4.100	0.25	0.02	3.2	-0.20 to -0.47
CCL4500	3.900	4.500	5.100	0.20	0.01	3.7	-0.22 to -0.50
CCL5750	5.000	5.750	6.500	0.05	0.005	4.5	0.25 to -0.53

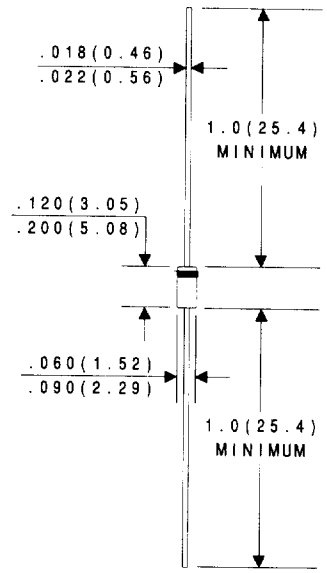
(1) PULSED METHOD. PULSE WIDTH (ms) = $\frac{27.5}{\text{Ip NOM (mA)}}$

*The Temperature Coefficient is measured between +25°C and +50°C

Typical Regulator Current vs. Voltage

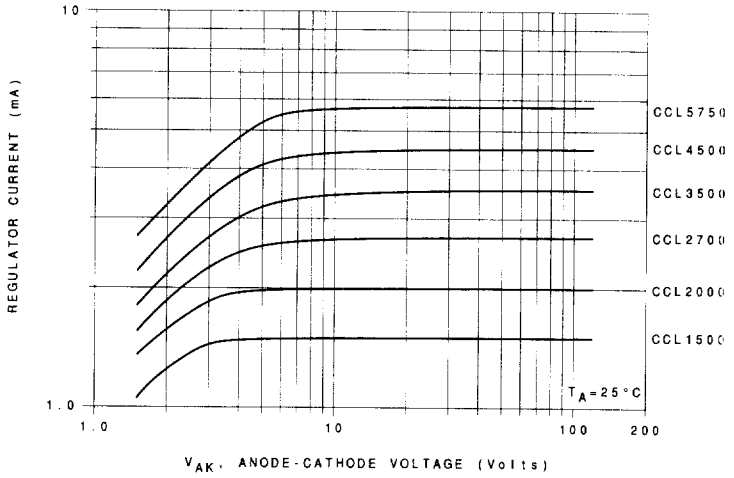


HERMETICALLY SEALED GLASS CASE
WITH TINNED COPPER LEADS

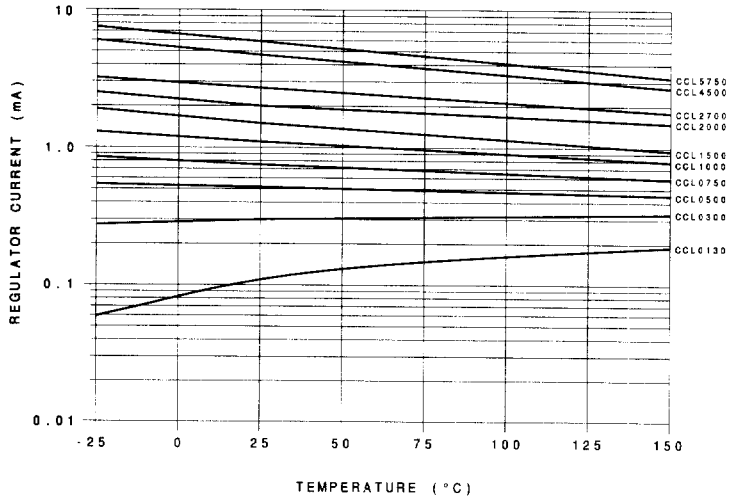


Dimensions in Inches (mm).

Typical Regulator Current vs. Voltage



Typical Regulator Current vs. Temperature



Central™ Semiconductor Corp.