

# DIGITRON SEMICONDUCTORS

**CCL0035-CCL5750**

**CURRENT LIMITING DIODE**

Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).  
Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

## MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak operating voltage	POV	100	V
Power dissipation	P <sub>d</sub>	600	mW
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>stg</sub>	-65 to +200	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted)

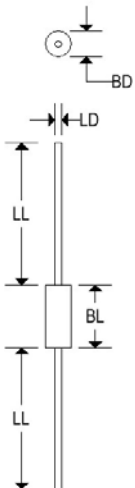
Part number	Regulator current <sup>(1)</sup>			Minimum dynamic impedance	Minimum knee impedance	Maximum limiting voltage	Temperature coefficient <sup>(2)</sup>
	I <sub>p</sub> @ V <sub>T</sub> = 25V			Z <sub>T</sub> @ V <sub>T</sub> = 25V	Z <sub>k</sub> @ V <sub>k</sub> = 6.0V	V <sub>L</sub> @ I <sub>L</sub> = 0.8 I <sub>p</sub> min	TC
	mA			MΩ	MΩ	V	%/°C
	Min	Nom	Max				
<b>CCL0035</b>	0.010	0.035	0.060	8.0	4.0	0.4	2.10 to 0.10
<b>CCL0130</b>	0.050	0.130	0.210	6.0	2.0	0.6	2.10 to 0.10
<b>CCL0300</b>	0.200	0.310	0.420	4.0	1.0	0.80	0.40 to -0.20
<b>CCL0500</b>	0.400	0.515	0.630	2.0	0.5	1.1	0.15 to -0.25
<b>CCL0750</b>	0.600	0.760	0.920	1.0	0.2	1.4	0.0 to -0.32
<b>CCL1000</b>	0.880	1.100	1.320	0.65	0.1	1.7	-0.10 to -0.37
<b>CCL1500</b>	1.280	1.500	1.720	0.45	0.070	2.0	-0.13 to -0.40
<b>CCL2000</b>	1.680	2.000	2.320	0.35	0.050	2.3	-0.15 to -0.42
<b>CCL2700</b>	2.280	2.690	3.100	0.30	0.030	2.7	-0.18 to -0.45
<b>CCL3500</b>	3.000	3.550	4.100	0.25	0.020	3.2	-0.20 to -0.47
<b>CCL4500</b>	3.900	4.500	5.100	0.20	0.010	3.7	-0.22 to -0.50
<b>CCL5750</b>	5.000	5.750	6.500	0.05	0.005	4.5	-0.25 to -0.53

Note 1: Pulsed method: pulse width(ms) = 27.5/ I<sub>p</sub> Nom (mA)

Note 2: The temperature coefficient is measured between the following points: +25°C, +50°C

## MECHANICAL CHARACTERISTICS

<b>Case</b>	DO-35
<b>Marking</b>	Body painted, alpha-numeric
<b>Polarity</b>	Cathode band



	DO-35			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.055	0.090	1.400	2.290
BL	0.120	0.200	3.050	5.080
LD	0.018	0.022	0.460	0.560
LL	1.000	1.500	25.400	38.100