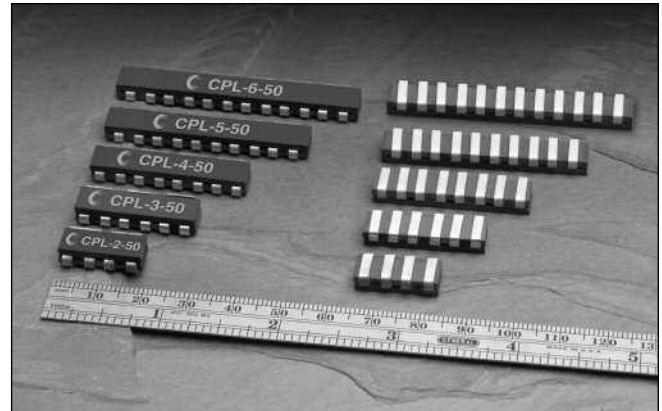


**Description**

- Designed exclusively for use with Volterra VPR-Devices<sup>(A)</sup>
- High current multi-phase inductor applications
- Ferrite core material
- 50nH per phase coupled inductor
- 125°C maximum temperature operation
- Frequency range up to 2MHz
- Patents pending
- For tape and reel parts add TR after part number: CPL-x-xxTR-R



**Environmental Data**

- Storage temperature range: -40°C to +125°C
- Operating temperature range: -40°C to +125°C (range is application specific)
- Solder reflow temperature: +260°C max. for 10 seconds maximum

**Packaging**

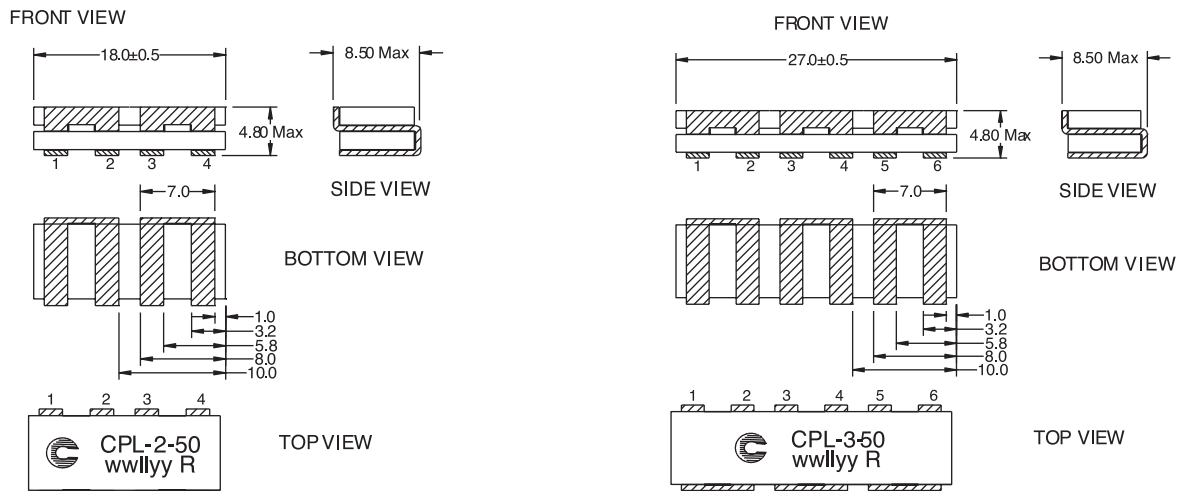
- Supplied in bulk trays or tape and reel:  
 CPL-2-50-R: 120 per tray      CPL-2-50TR-R: 750 per reel  
 CPL-3-50-R: 90 per tray      CPL-3-50TR-R: 750 per reel  
 CPL-4-50-R: 75 per tray      CPL-4-50TR-R: 750 per reel  
 CPL-5-50-R: 60 per tray      CPL-5-50TR-R: 750 per reel  
 CPL-6-50-R: 45 per tray      CPL-6-50TR-R: 750 per reel

Part Number	Inductance Phases	Functional Specifications			Test Specifications				
		DCR (Ω) nom. @ 25°C	DCR (Ω) max. @ 25°C	Leakage Inductance (nH)	Pin Number	OCL (nH) notes 1&2	Pin Number	OCL (nH) notes 1&2	Magnetizing Inductances @ 5Adc (25°C)
CPL-2-50-R	2	0.0005	0.0006	50 ± 20%	(1-2)	365 ± 18%	(3-4)	365 ± 18%	300
CPL-3-50-R	3	0.0005	0.0006	50 ± 20%	(3-4)	490 ± 20%	(1-2), (5-6)	365 ± 18%	400
CPL-4-50-R	4	0.0005	0.0006	50 ± 20%	(3-4), (5-6)	490 ± 20%	(1-2), (7-8)	365 ± 18%	400
CPL-5-50-R	5	0.0005	0.0006	50 ± 20%	(3-4), (5-6), (7-8)	490 ± 20%	(1-2), (9-10)	365 ± 18%	400
CPL-6-50-R	6	0.0005	0.0006	50 ± 20%	(3-4), (5-6), (7-8), (9-10)	490 ± 20%	(1-2), (11-12)	365 ± 18%	400

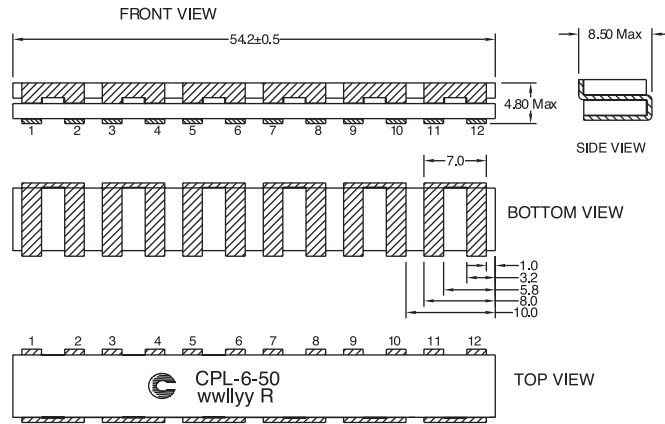
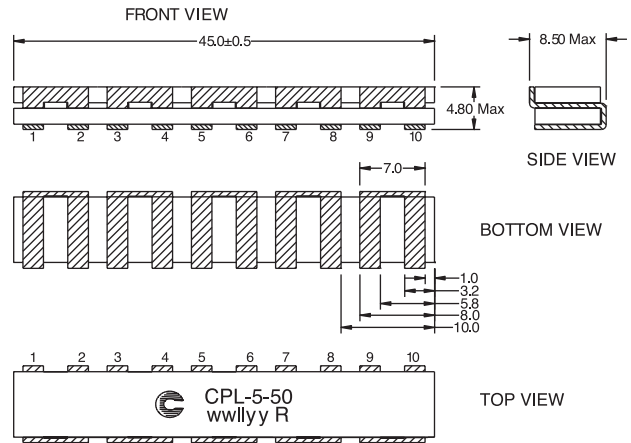
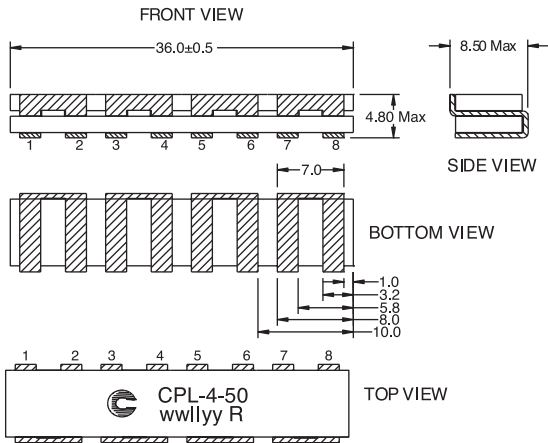
(1) OCL (Open Circuit Inductance)  
 (2) Test parameters: 1MHz, 0.1Vrms, 0.0Adc.

(A) This device is licensed for use only when incorporated within a voltage regulator employing power regulating devices manufactured by Volterra Semiconductor Corp. No license is granted expressly or by implication to use this device with power regulating devices manufactured by any company other than Volterra.

**Mechanical Diagrams**

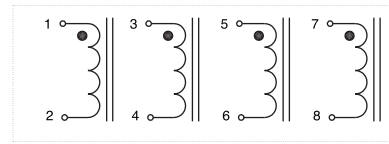
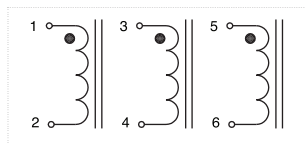
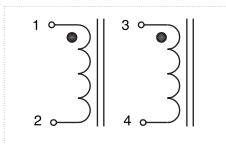
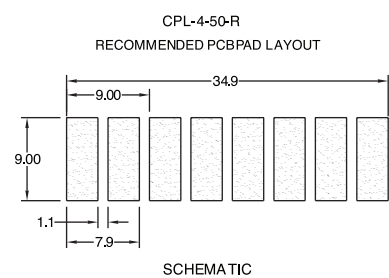
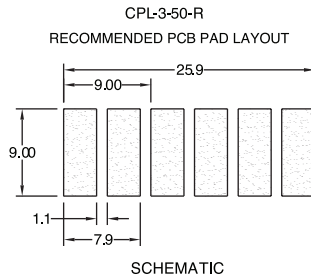
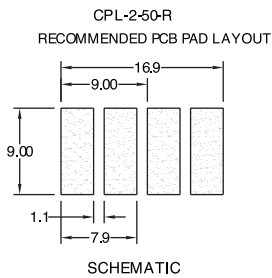


**Mechanical Diagrams**

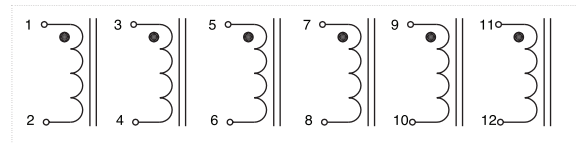
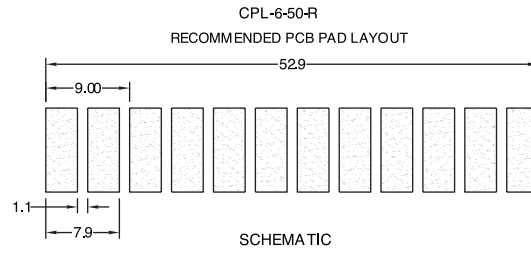
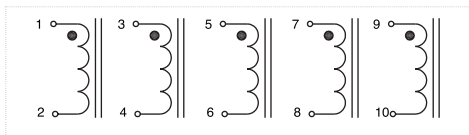
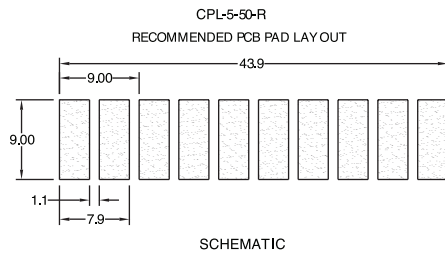


Dimensions are in millimeters. All dimensions +/-0.2 mm unless otherwise specified. wwllyy = (date code) R = revision level

**Schematic/PCB Layout**

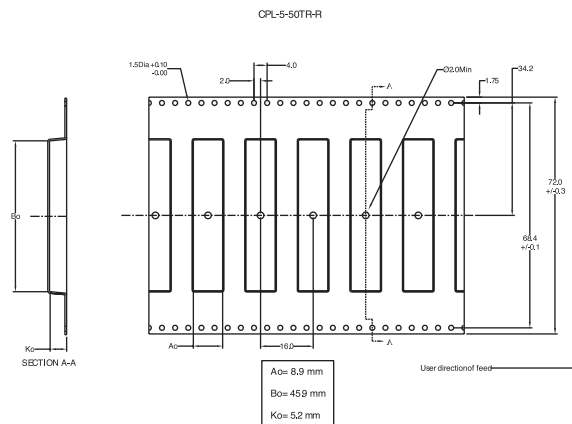
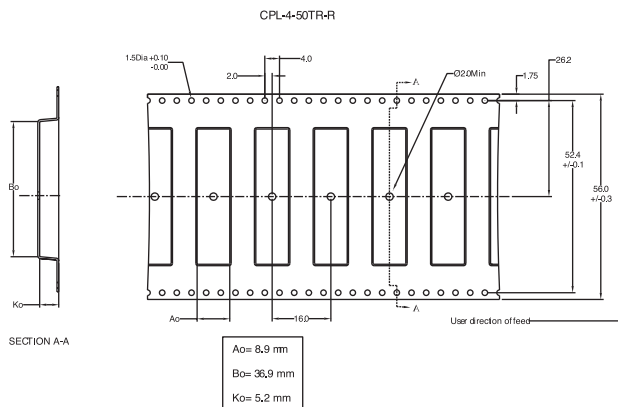
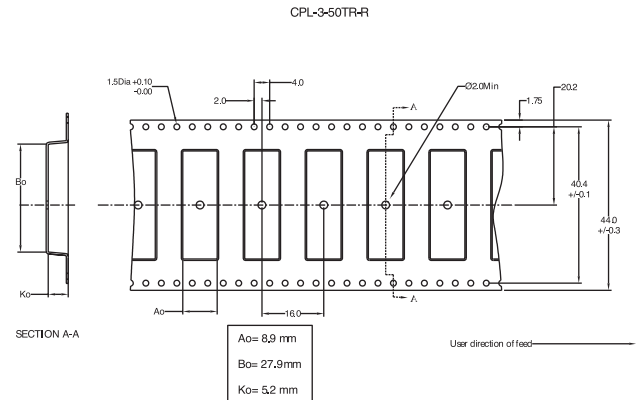
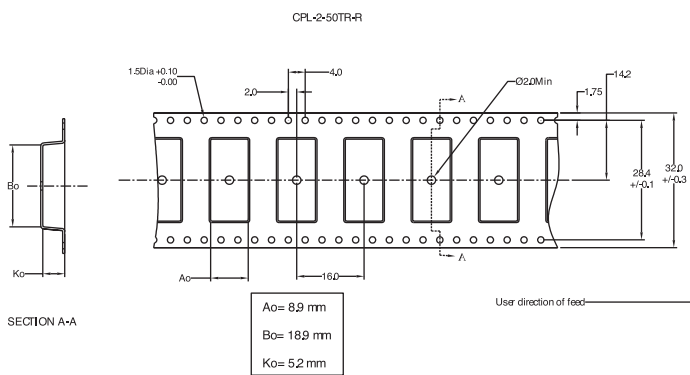


**Schematic/PCB Layout**

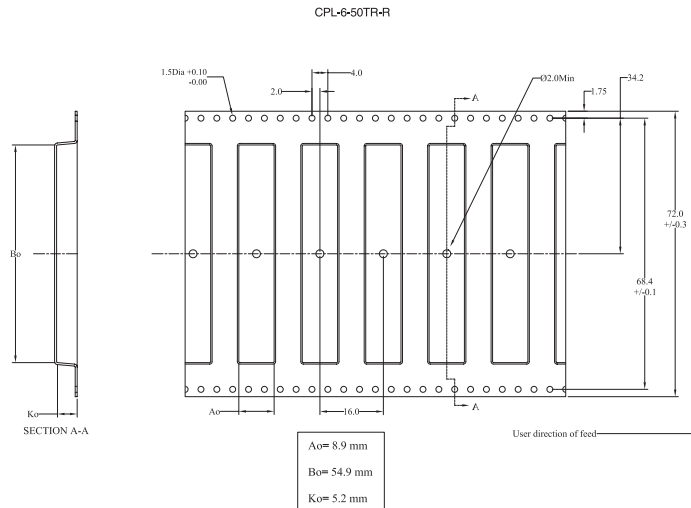


Dimensions are in millimeters. All dimensions +/-0.2 mm unless otherwise specified.

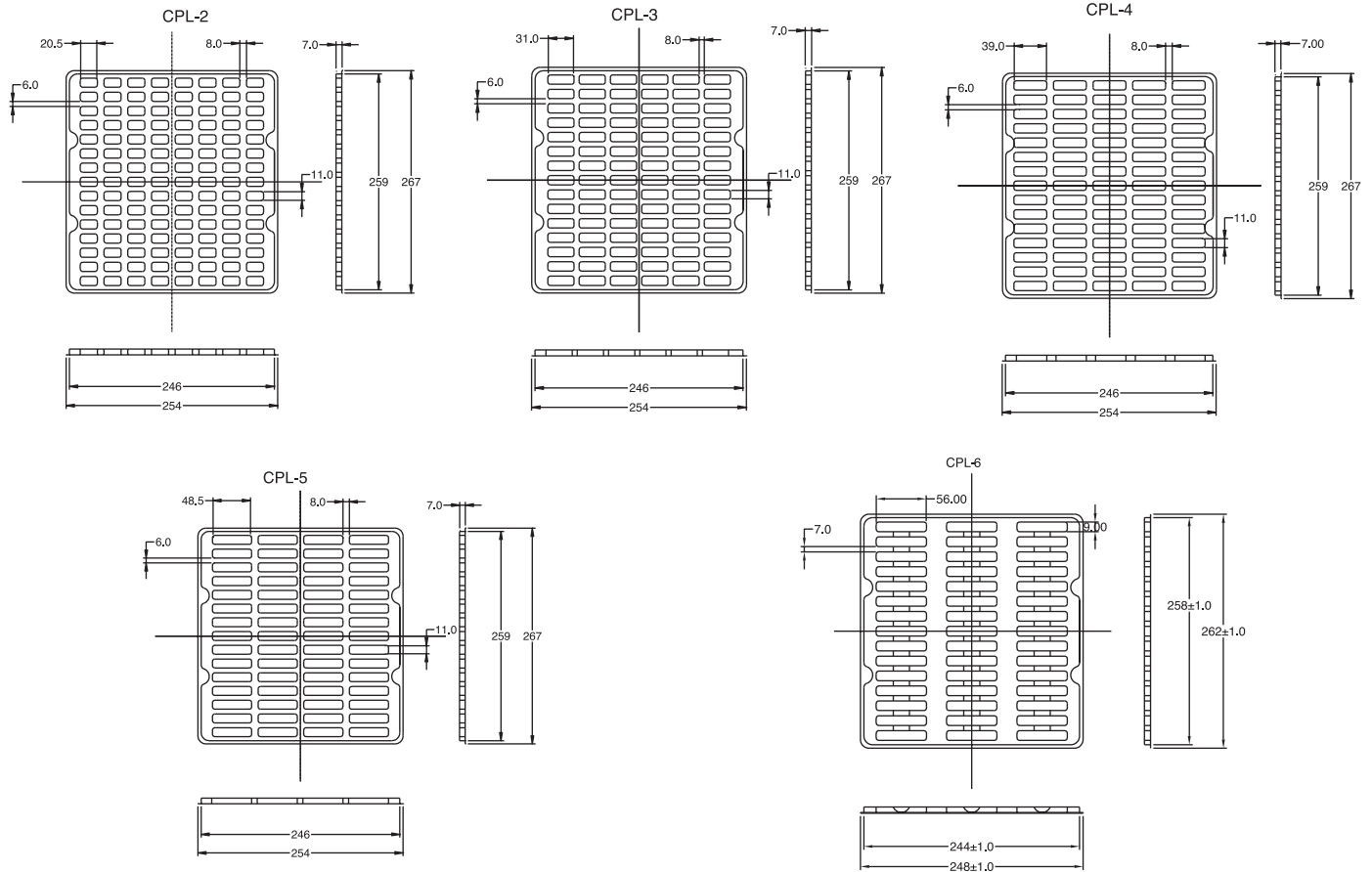
**Packaging Information (Tape and Reel)**



**Packaging Information (Tape and Reel)**



**Packaging Information (Bulk Tray)**



Notes:  
 Material: 0.8 PVC with internal Anti-Stat  
 Tolerances: x.xx = ± 0.20, x.x = ± 0.50, x = ± 2.0 unless otherwise specified.  
 Trays are stackable when rotated 180°.  
 All dimensions are in mm.

**Visit us on the Web at [www.cooperbussmann.com](http://www.cooperbussmann.com)**

1225 Broken Sound Pkwy. Suite F Boca Raton, FL 33487  
Tel: +1-561-998-4100 Toll Free: +1-888-414-2645 Fax: +1-561-241-6640

This bulletin is intended to present product design solutions and technical information that will help the end user with design applications. Cooper Electronic Technologies reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Electronic Technologies also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Electronic Technologies does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.