

## Description

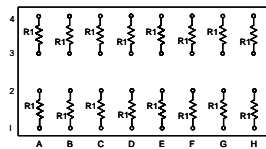
These LVPECL and LVDS termination networks are designed for high performance termination of differential Input/Output signals on some of the most popular Field Programmable Gate Arrays (FPGAs).

Both input (RX) and output (TX) termination is provided.

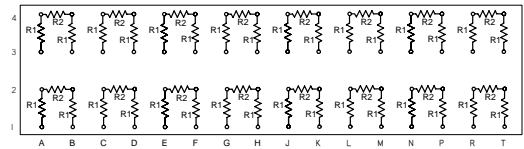
## Features

- Designed for termination of Xilinx® and Altera® FPGAs.
- 8 or 16 differential channels of termination provided in a single integrated package
- Excellent high frequency performance
- High density ceramic BGA package
- RoHS Compliant Designs Available
  - Compatible with both lead and lead-free manufacturing processes

## Style C



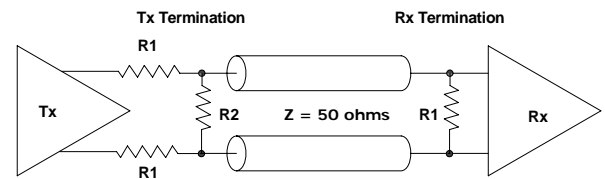
## Style I



## Electrical Specifications

Resistor Tolerance:	± 1.0%
TCR	±200ppm/°C
Operating Temperature Range	-55°C to +125°C
Maximum Resistor Power:	0.068 Watts at 70°C
Maximum Package Power:	1.0 Watts at 70°C
<b>Process Requirements:</b>	
Maximum Re-flow Temperature	Per IPC/JEDEC J-STD-020C

## Typical Application



## Ordering Information

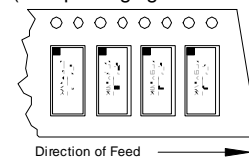
1.27mm Pitch Standard Part No.	1.00mm Pitch Standard Part No.	Style	R1 Ω	R2 Ω	Array Size	1.27mm Pitch RoHS Part No.	1.00mm Pitch RoHS Part No.
RT1710B6	RT1710B7	C	100	-	4 x 8	RT2710B6	RT2710B7
-	RT1720B7	I	187	100	4 x 16	-	RT2720B7
RT1721B6	RT1721B7	I	187	100	4 x 8	RT2721B6	RT2721B7
-	RT1722B7	I	140	165	4 x 16	-	RT2722B7
RT1723B6	RT1723B7	I	140	165	4 x 8	RT2723B6	RT2723B7
-	RT1724B7	I	140	135	4 x 16	-	RT2724B7
RT1725B6	RT1725B7	I	140	135	4 x 8	RT2725B6	RT2725B7
-	RT1726B7	I	70	187	4 x 16	-	RT2726B7
RT1727B6	RT1727B7	I	70	187	4 x 8	RT2727B6	RT2727B7
-	RT1728B7	I	70	240	4 x 16	-	RT2728B7
RT1729B6	RT1729B7	I	70	240	4 x 8	RT2729B6	RT2729B7

## Part Number Coding

7 inch reel, Add TR7 to part number, example RT2400B6TR7

13 inch reel, Add TR13 to part number, example RT2400B6TR13

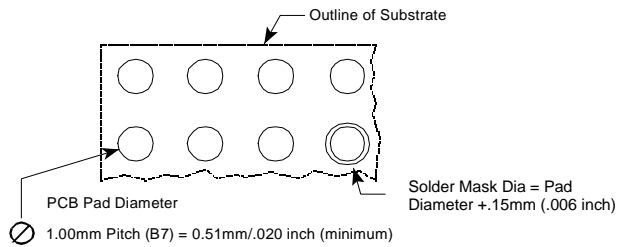
(Bulk packaging is not available)



## Packaging Information

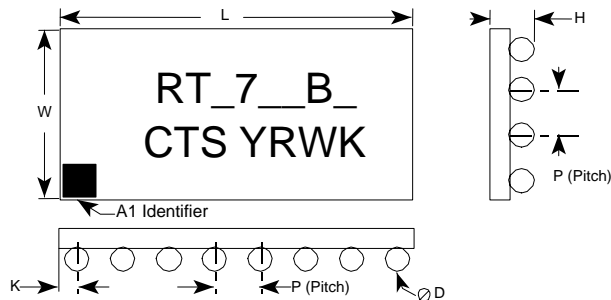
Suffix	TR7	TR13
Tape Width	24 mm	24mm
Carrier Pitch	8 mm	8 mm
Reel Diameter	7 inch	13 inch
Parts/Reel	1,000	4,000

## Recommended Land Pattern



For .006" Thick Solder Paste Stencil, Aperture Opening Should be Equal to the PCB Pad Diameter.  
 Refer to [www.ctscorp.com/components/clearone.asp](http://www.ctscorp.com/components/clearone.asp) for additional PCB design information

## Mechanical Diagram



1.27mm Pitch			L	W	H	P	D	K
RT1710B6	RT2710B6	mm	10.16±0.15	5.08±0.15	1.32±0.15	1.27±0.25	0.76±0.05	0.64±0.25
RT1721B6	RT2721B6							
RT1723B6	RT2723B6	inch	.400±.006	.200±.006	.052±.006	.050±.010	.030±.002	.025±.010
RT1725B6	RT2725B6							
RT1727B6	RT2727B6							
RT1729B6	RT2729B6							
1.0mm Pitch			L	W	H	P	D	K
RT1710B7	RT2710B7	mm	8.00±0.15	4.00±0.15	1.19±0.15	1.00±0.25	0.64±0.05	0.50±0.25
RT1721B7	RT2721B7							
RT1723B7	RT2723B7	inch	.315±.006	.157±.006	.047±.006	.039±.010	.025±.002	.020±.010
RT1725B7	RT2725B7							
RT1727B7	RT2727B7							
RT1729B7	RT2729B7							
RT1720B7	RT2720B7	mm	16.00±0.15	4.00±0.15	1.19±0.15	1.00±0.25	0.64±0.05	0.50±0.25
RT1722B7	RT2722B7							
RT1724B7	RT2724B7	inch	.630±.006	.157±.006	.047±.006	.039±.010	.025±.002	.020±.010
RT1726B7	RT2726B7							
RT1728B7	RT2728B7							

Complete ClearONE Product, Processing, and Application Information can be found at the following link:

<http://www.ctscorp.com/components/clearone.asp>

### FPGA Application notes:

<http://www.ctscorp.com/components/Datasheets/ClearOneANC1FPGALVPECLA.pdf>

<http://www.ctscorp.com/components/Datasheets/ClearOneANC1FPGALVDSA.pdf>