



### Description

This LVD SCSI termination network is designed for high performance active termination of SCSI networks compliant to SPI-2 (Ultra2), SPI-3 (Ultra3) and beyond.

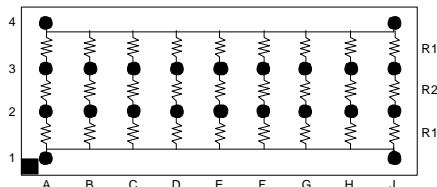
Designed with a ceramic substrate and a ball grid array interconnect, this device virtually eliminates channel capacitance and lead inductance, the primary cause of reduced system performance.

BGA packaging has been proven to reduce rework and improve reliability.

### Features

- 9 Line LVD Termination Network
- Ultra2 and Ultra3 Compliant
- Low Channel Capacitance Less than 0.25pF
- BGA package reliability
- $\pm 1\%$  Resistor Tolerance
- Low Channel Cross Talk
- RoHS Compliant Designs Available
  - Compatible with both lead and lead-free manufacturing processes

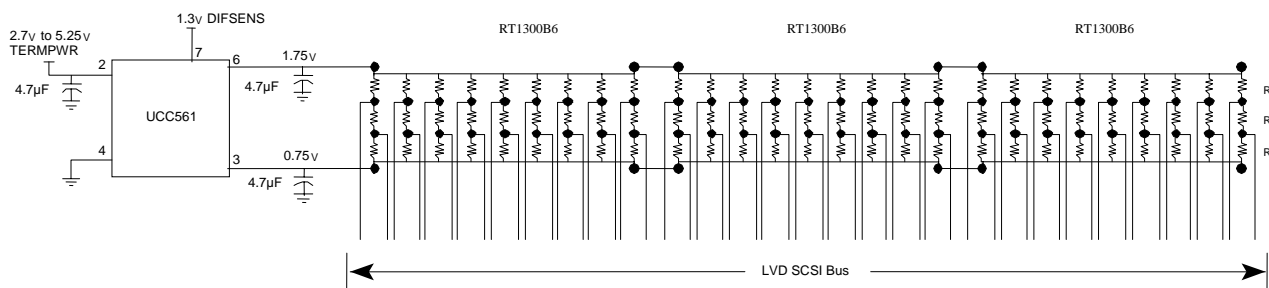
### Style E Schematic Diagram



### Electrical Specifications

Resistor Tolerance:	$\pm 1.0\%$
TCR	$\pm 200\text{ppm}/^\circ\text{C}$
Operating Temperature Range	$-55^\circ\text{C}$ to $+125^\circ\text{C}$
Maximum Resistor Power:	0.05 Watts at $70^\circ\text{C}$
Maximum Package Power:	1.0 Watts at $70^\circ\text{C}$
<b>Process Requirements:</b>	
Maximum Re-flow Temperature	Per IPC/JEDEC J-STD-020C

### LVD SCSI Active Termination Circuit



### Ordering Information

Standard Part No.	R1 $\Omega$	R2 $\Omega$	Lines	Pitch (mm)	RoHS Part No.
RT1300B6*	475	121	9	1.27	RT2300B6*

\*Indicates available Top Probe-able part numbers.  
Refer to the following link for detailed Top Side Probe-able information:  
[www.ctscorp.com/components/clearone/TopProbeClearOne.pdf](http://www.ctscorp.com/components/clearone/TopProbeClearOne.pdf)

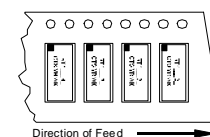
### Packaging Information

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

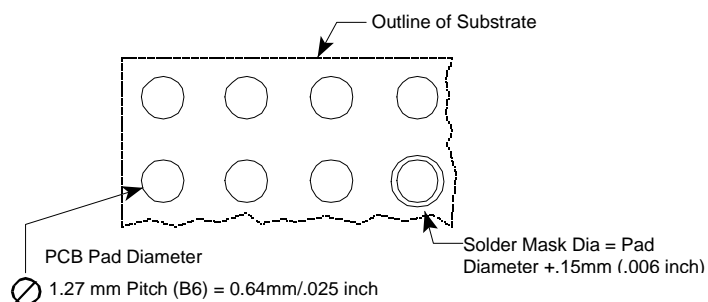
**Part Number Coding**  
7 inch reel, Add TR7 to part number, example RT2300B6TR7

13 inch reel, Add TR13 to part number, example RT2300B6TR13

(Bulk packaging is not available)



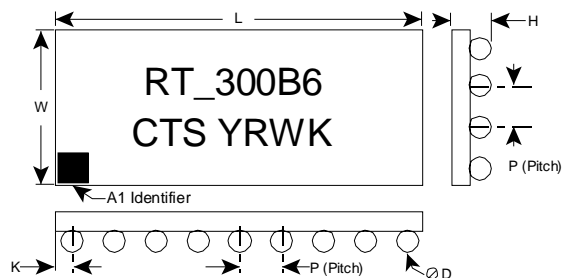
## Recommended Land Pattern



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
RT1300B6 RT2300B6	mm	11.43±0.15	5.08±0.15	1.32±0.15	1.27±0.25	0.76±0.05	0.64±0.25
	Inch	.450±.006	.200±.006	.052±.006	.050±.010	.030±.002	.025±.010

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

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