

# HIGH SPEED LAN MAGNETICS

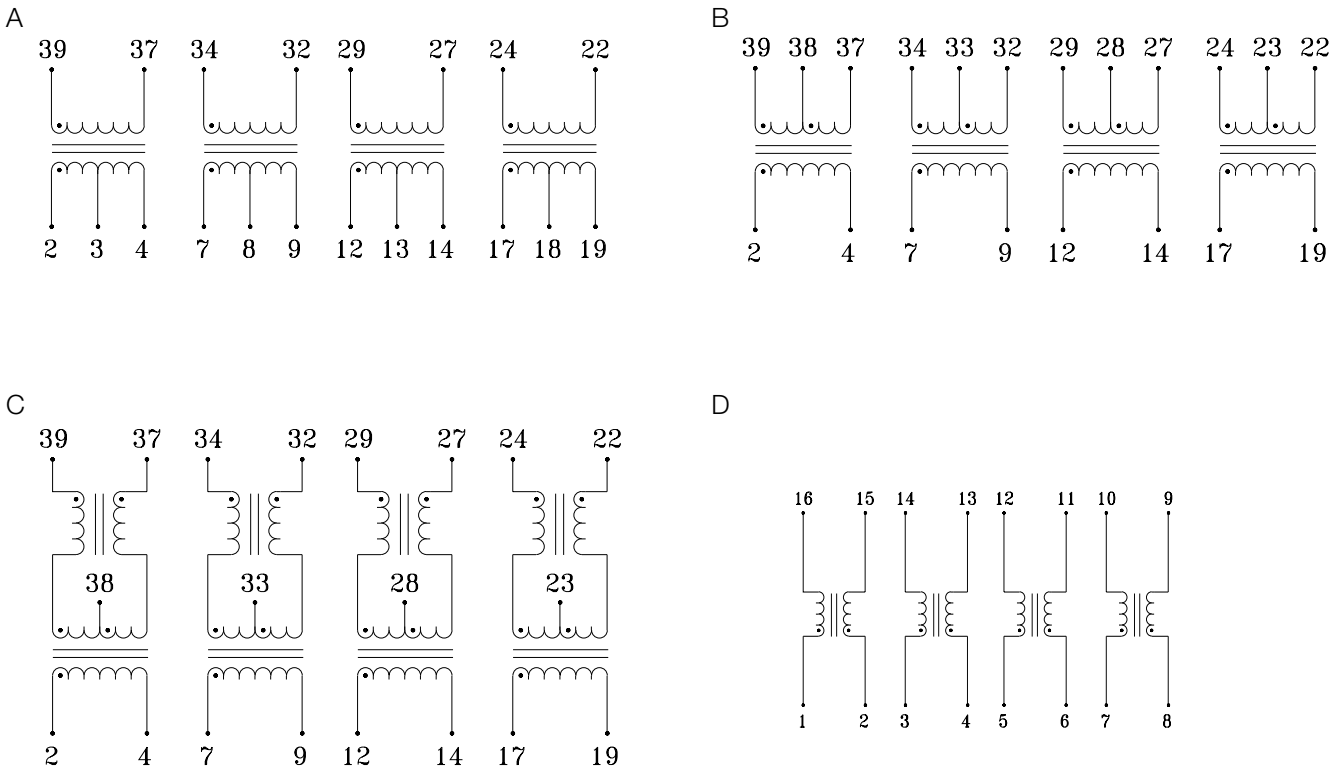
- Designed for use with either Seeq 80C240 or Cypress Semiconductor CY7C971 100Base-T4 transceivers
- Complies with IEEE 802.3 standards
- Multiple design options, no CMC, integrated CMC or separately packaged CMC
- Low profile, surface mount packaging, rated to 225°C peak IR reflow temperature
- 2000 Vrms isolation

## ELECTRICALS AT 25°C

Part No.	Turns Ratio	Sec Inductance (UTP side) OCL (μH) Min	Leakage Inductance L <sub>L</sub> (μH) Max	Coupling Capacitance C <sub>ww</sub> (pF) Max	Pri/Sec (ohms) Max	Schematic	Package Style
S553-5999-46	1:2CT;1:2CT;1:2CT;1:2CT	350	0.25	12	0.3/1.0	B	1
S553-5999-49	1:2CT;1:2CT;1:2CT;1:2CT	350	0.25	12	0.3/1.0	C	1
S555-1204-00*	1:1;1:1;1:1;1:1	40 (primary)	N/A	N/A	N/A	D	2
S558-5999-C5	2CT:1;2CT:1;2CT:1;2CT:1	350	0.25	1.0	0.3/1.0	A	1

\*common mode choke

## SCHEMATICS

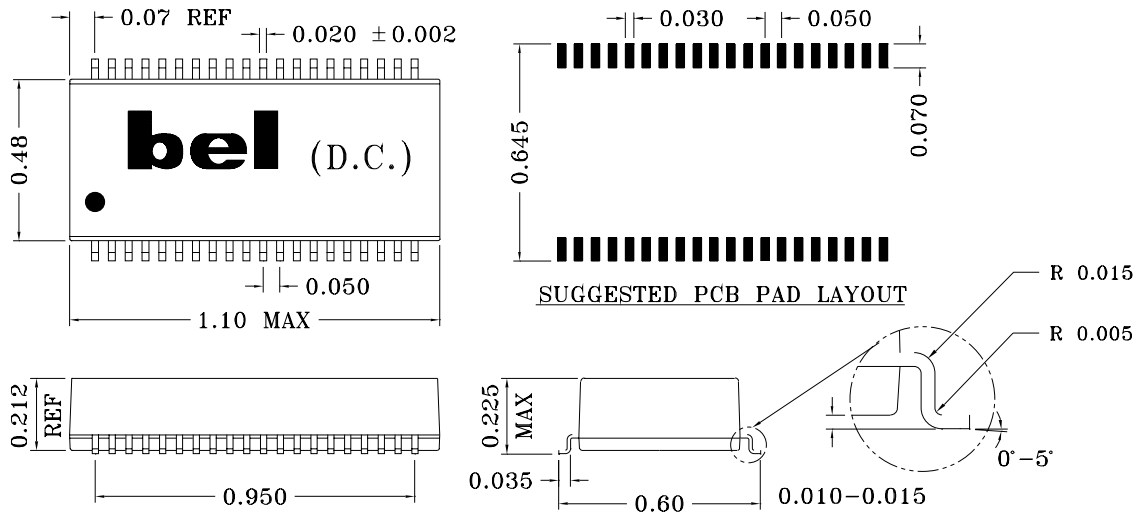


Specifications subject to change without notice.

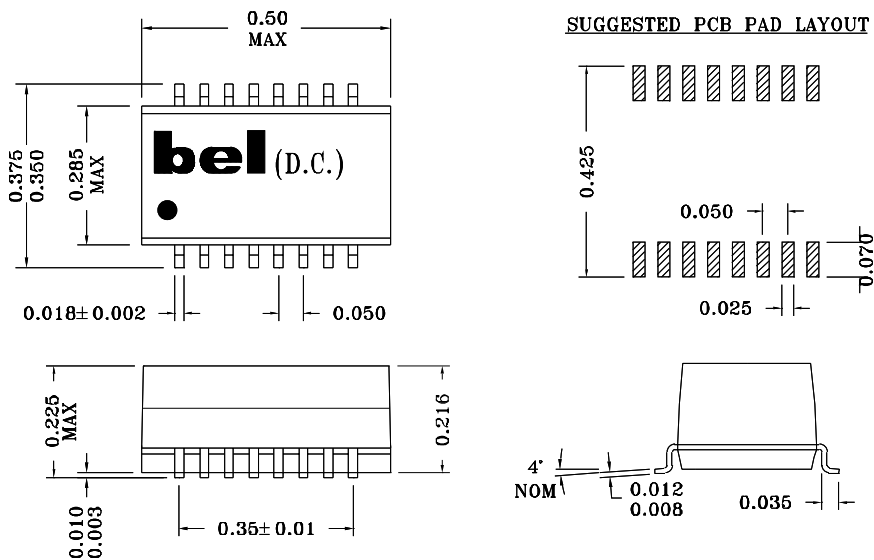
960033A

### MECHANICALS

1



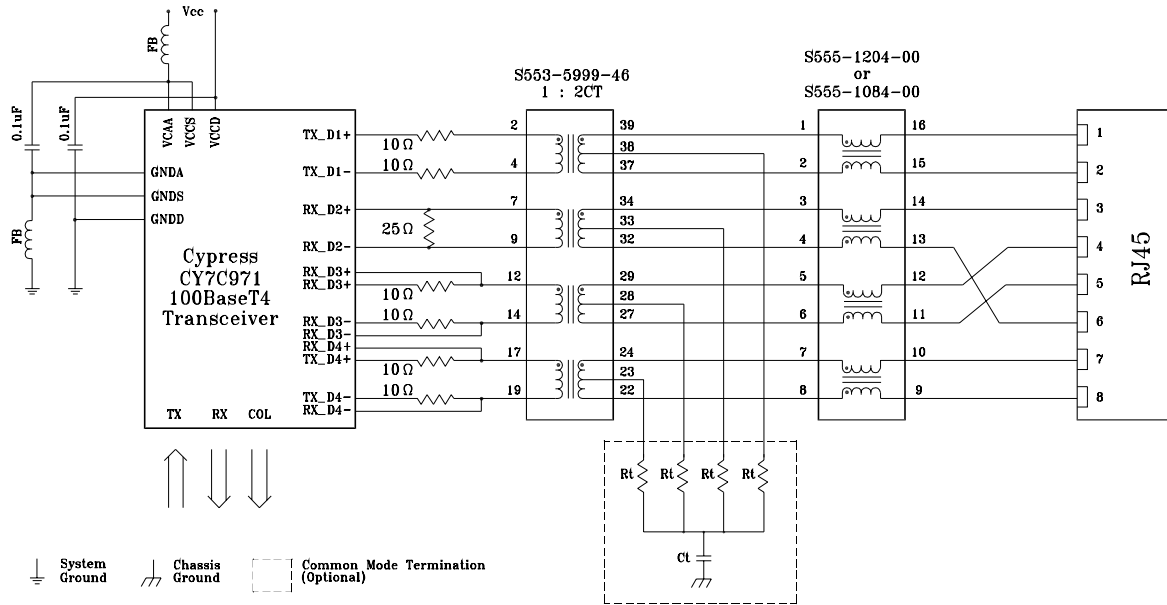
2



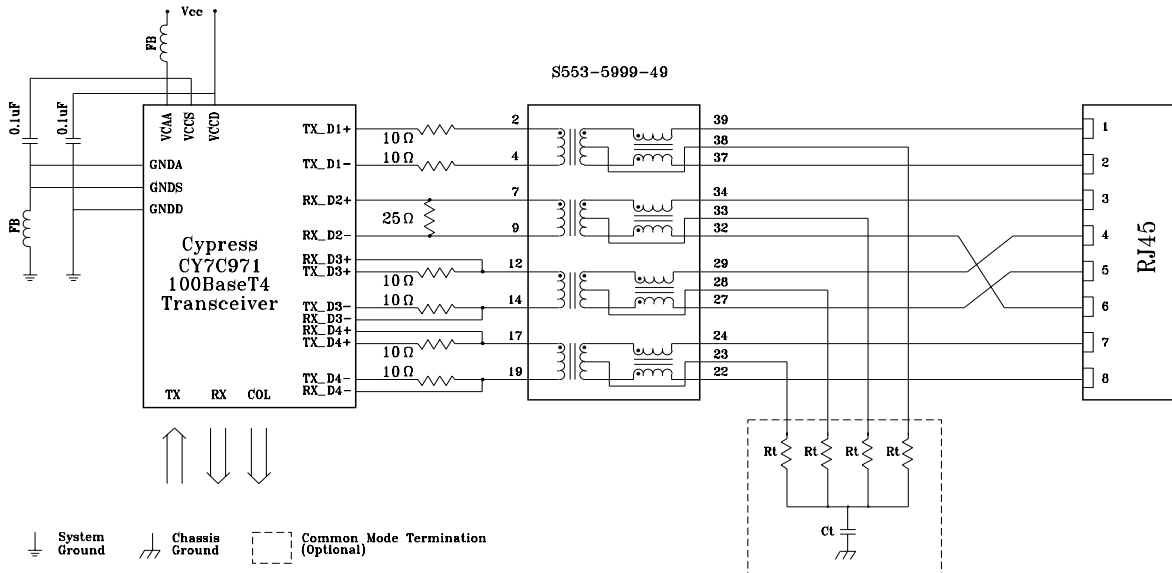
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## APPLICATION CIRCUITS



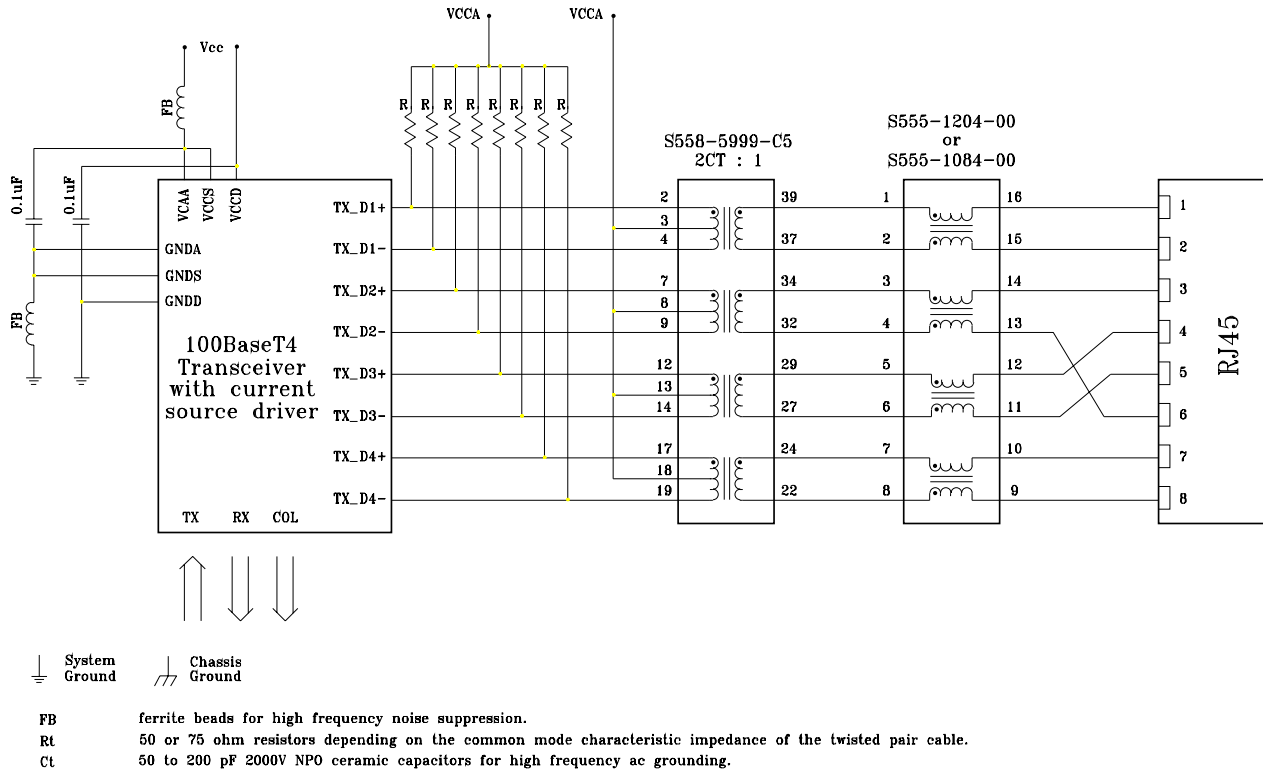
- FB ferrite beads for high frequency noise suppression.
- Rt 50 or 75 ohm resistors depending on the common mode characteristic impedance of the twisted pair cable.
- Ct 50 to 200 pF 2000V NPO ceramic capacitors for high frequency ac grounding.



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### APPLICATION CIRCUITS (CONT'D)



### APPLICATION NOTES

- These parts have been developed for use with multiple IC transceivers for 100Base-T4 category 3, 4, or 5 UTP cable applications. There are multiple design options available for optimization of the specific application.
- Bel's low profile, surface mount packaging is ideal for high speed pick and place machinery. Parts can be shipped on tape and reel for high speed placement. Construction processes have been implemented for thermal compatibility with high temperature IR reflow assembly processing. Post dipping of leads assist with PC board solderability. Each part is optically inspected to meet rigid coplanarity requirements.

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