

# HIGH SPEED LAN MAGNETICS

- Designed for use with either Broadcom BCM 5000 or BCM 5100 100Base-T4 PHY transceivers
- Complies with IEEE 802.3u standards
- Low profile, surface mount packaging, rated to 225°C peak IR reflow temperature
- 2000 Vrms isolation

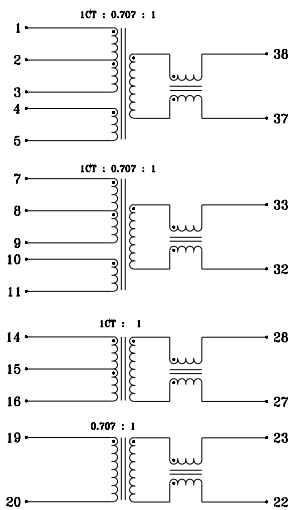
## ELECTRICALS AT 25°C

Part No.	Insertion Loss (dB) Typ 1-12.5MHz	Return Loss (dB) Max 1-12.5MHz	Crosstalk (dB) Min 1-12.5MHz	Common to Common Mode Rej (dB) Min 1MHz-60MHz	Schematic
S553-3873-23 (1)	-1.0	-18	-40	-50	A
S558-3873-27	-1.0	-18	-40	-50	B

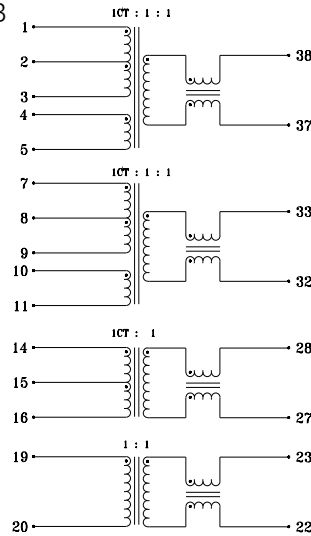
(1) Requires the use of external filter (see Application Notes).

## SCHEMATICS

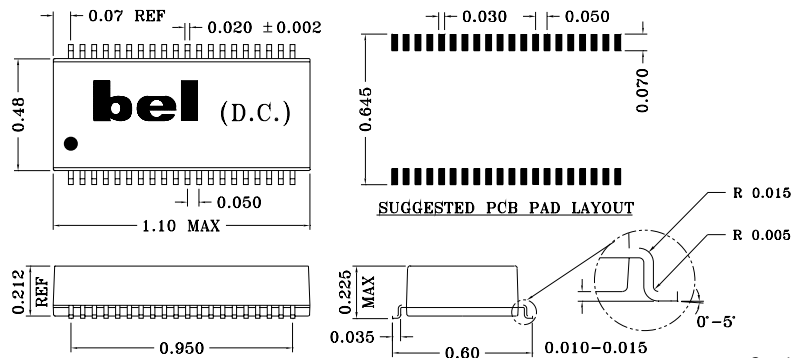
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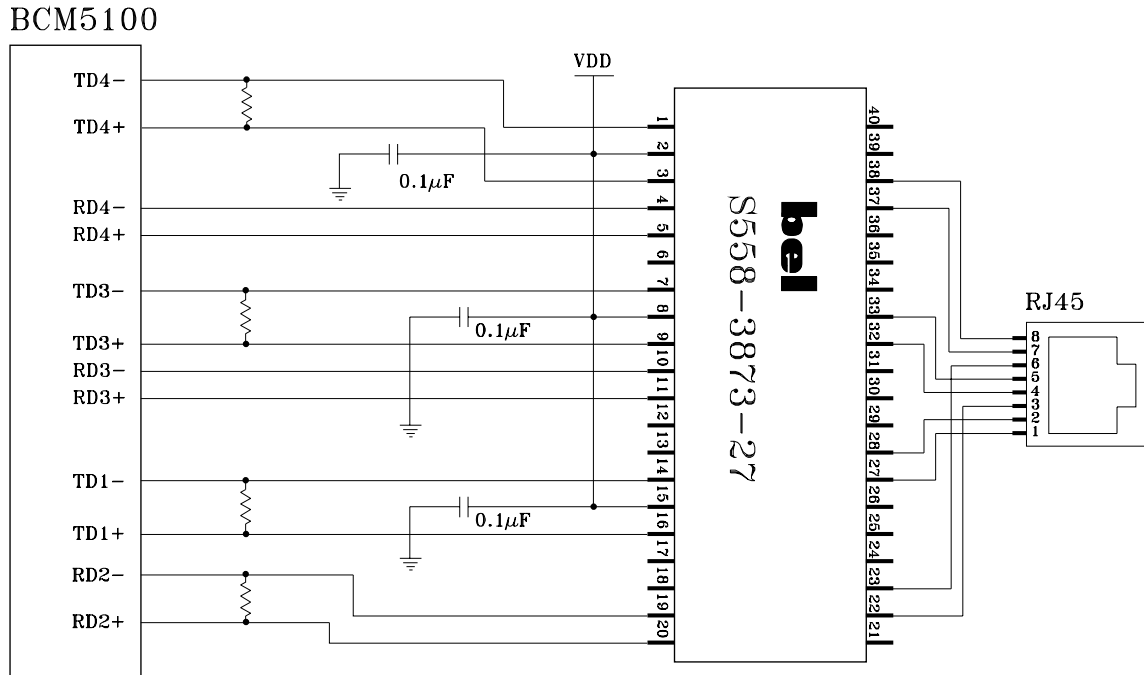
B



## MECHANICAL



Specifications subject to change without notice.

**APPLICATION CIRCUIT**

DTE APPLICATION

NOTE: Please consult Broadcom for detail circuit schematic

**APPLICATION NOTES**

- The S553-3873-23 and S558-3873-27 have been designed for use with Broadcom BCM 5000 and BCM 5100 100Base-T4 transceivers. Utilization of the S553-3873-23 with the BCM 5000 requires additional differential filtering placed as discrete components externally on the PCB layout. Bel can provide information regarding the required circuit and component values. Both of these Bel parts can be used in 100Base-T4 adapter card or multi-port repeater applications with category 3, 4 or 5 UTP/STP media cable.
- 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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