Features
- Designed to meet IEEE 802.3u (100 Base-T)
- Expanded temperature range: -40 to +125 °C
- RoHS compliant* and halogen free**
- AEC-Q200 compliant

** Bourns defines a product to be “halogen free” if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Electrical Specifications @ 25 °C

OCL (100 kHz, 0.1 V, 8 mA DC Bias) ........................................350 µH Min.
Leakage Inductance (100 kHz, 0.1 V)
TD with TX Shorted............... 0.5 µH Max.
RD with RX Shorted........... 0.5 µH Max.

Turns Ratio
TD : TX.......................... 1 : 1 (±2 %)
RD : RX.......................... 1 : 1 (±2 %)

DCR
TD & RD..........................1.4 ohm Max.
TX & RX..........................1.0 ohm Max.

Insertion Loss (TD to TX & RD to RX)
1-100 MHz..........................-1.1 dB Max.

Return Loss (TD to TX & RD to RX with 100 ohm load)
1-40 MHz..........................-16 dB Min.
40-100 MHz.........................-10+20*log (f/80 MHz) dB Min.

Cross Talk (Between Each Channel)
1-60 MHz..........................-40 dB Min.
60-100 MHz.........................-35 dB Min.

Common Mode Rejection (TD to TX & RD to RX)
1-60 MHz..........................-37 dB Min.
60-100 MHz.........................-30 dB Min.

Differential to Common Mode Rejection Ratio
(TD to TX & RD to RX)
30 MHz..........................-35 dB Min.
60 MHz..........................-35 dB Min.

Hi-Pot (TD to TX & RD to RX @ 1 mA, 60 sec.).............................1500 Vrms & 2250 Vdc

Storage Temperature.............-40 to +125 °C
Operating Temperature...........40 to +125 °C

Moisture Sensitivity Level.............1
ESD Classification (HBM)...........N/A

Recommended Layout

How To Order

SM91073 A L - E

Model
AEC-Q200 Compliant
Termination
L = Cu/Ni/Sn (RoHS Compliant)
Packaging
E = Tape and Reel (600 pcs. per reel)

Electrical Schematic

Packaging Specifications

Tape & Reel..........................600 pcs./reel

WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

* Users should verify actual device performance in their specific applications.

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Specifications are subject to change without notice. 
Users should verify actual device performance in their specific applications.  
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Packaging Specifications

Specifications and tolerances comply with EIA-481 requirements.

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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