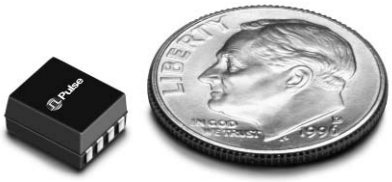
COMMON MODE CHOKE
For Fibre Channel, Gigabit Ethernet, and IEEE 1394 Applications



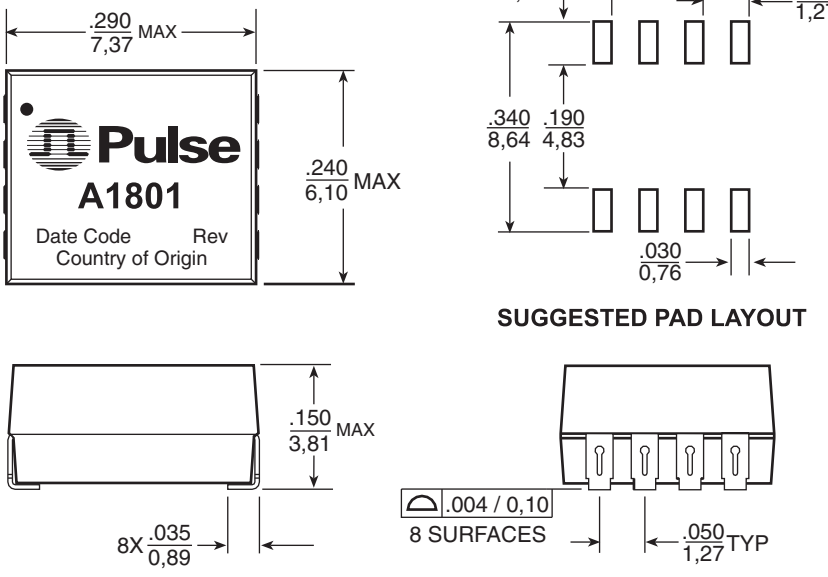
- Common Mode Attenuation from 200 MHz to 2.5 GHz
- Reduces radiated emissions and improves noise immunity
- 235°C Peak Reflow temperature rating
- Surface mount, auto-insertable package
- Industrial temperature range

Electrical Specifications @ 25°C — Operating Temperature -40°C to +85°C

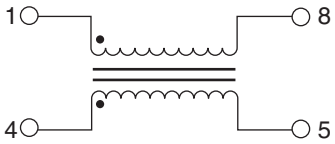
Part Number	Common Mode Attenuation (dB TYP)						Primary Inductance OCL (µH MIN)	DCR (Ω MAX)
	200 MHz	500MHz	1.0GHz	1.5GHz	2.0GHz	2.5GHz		
A1801	-11.0	-11.0	-11.0	-10.0	-9.0	-7.5	3.0	.15

Mechanical

A1801



Schematic



Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .005 / 0,13

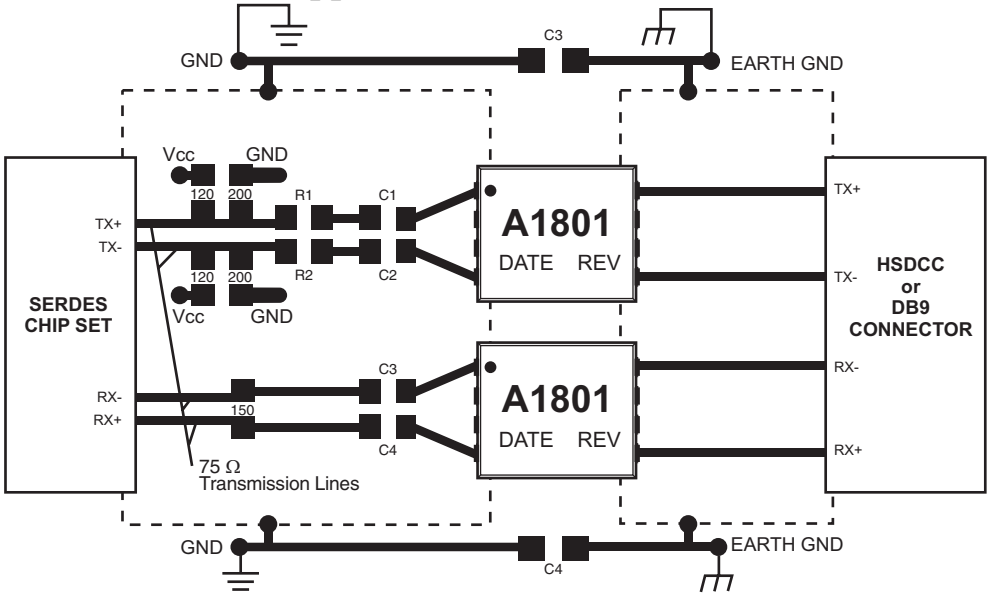
Weight . . . . . .0.2 grams (max)
Tape & Reel 1750/reel
Tube 80/tube

COMMON MODE CHOKE
For Fibre Channel, Gigabit Ethernet, and IEEE 1394 Applications

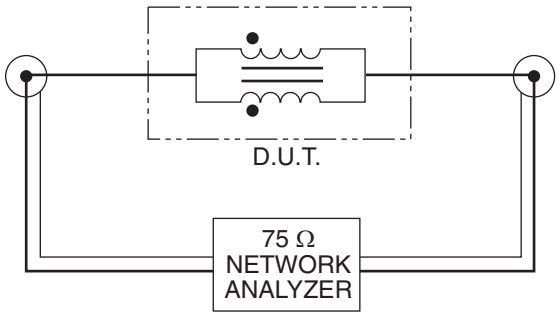
Application Notes:

1. Values for R1 and R2 are determined by system transmit amplitude requirements. A value of 0Ω for R1 and R2 will yield an output with maximum amplitude but distorted due to impedance mismatch. A value of 68Ω will provide an optimum waveform but have 6.0 dB insertion loss. If 6.0dB loss is too great, select at least 15Ω to obtain a reasonable compromise between insertion loss and waveshape. The typical value for C1, C2, C3, and C4 is 0.1µF.
2. To maintain return loss and signal integrity, transmission line methods must be used when designing the PCB. For best performance the common mode choke should be located no more than 1" from the cable connector.
3. One example of a possible layout is shown below for a Fibre Channel application. Note that actual board layouts will vary based upon specific applications and EMC considerations.

Typical Fibre Channel 150 Ω Application:



Test Circuit, Common Mode Attenuation:



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