



“PoE Plus” Magnetics

The **ETH1-230L**₁ is developed for high power PoE applications in support of the goals of the IEEE 802.3at-2009 standard. This module is designed for 2-pair cabling plants at 30 Watts and two modules may be used for 4-pair cabling in 60 Watt applications. It exceeds the return loss requirements of Gbit Ethernet.

It has a minimum open-circuit inductance of 350 μ H at an offset current of 35 mA at 25°C ambient temperature, and can handle 22.5 mA minimum dc offset at 85°C. Typical temperature rise from 25°C ambient is 7°C with 800 mA and 10°C with 1000 mA dc current applied to one center tap of each isolation transformer. Winding to winding isolation is 1500 Vrms. Ambient temperature range: -40°C to +85°C with 1 A current.

Request free evaluation samples by contacting Coilcraft or visiting www.coilcraft.com.

1. When ordering, please specify **packaging** code:

ETH1-230LD

Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (400 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

Core material Ferrite

Terminations RoHS compliant tin-silver-copper over tin over nickel over phos bronze

Weight 3.0 g

Ambient temperature -40°C to +85°C

Storage temperature Component: -40°C to +85°C.
Tape and reel packaging: -40°C to +80°C

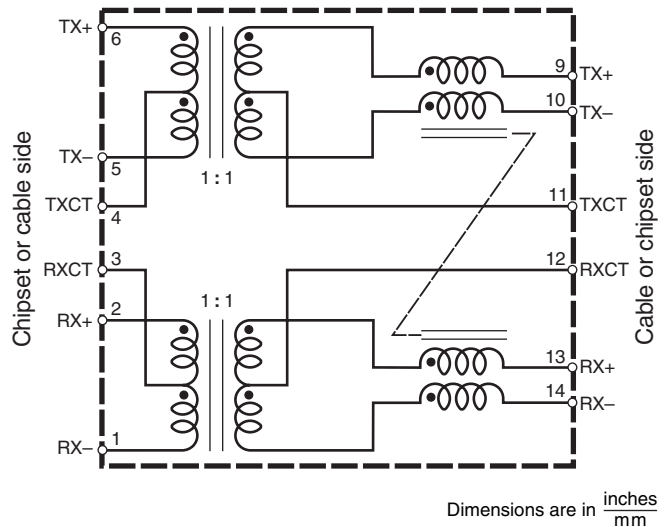
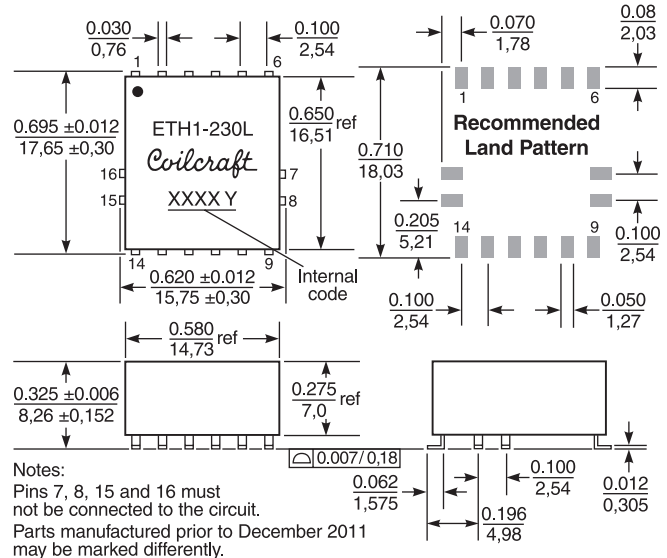
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)
60 per billion hours / 16,666,667 hours, calculated per Telcordia SR-332

Packaging 400/13" reel; Plastic tape: 32 mm wide, 0.5 mm thick,

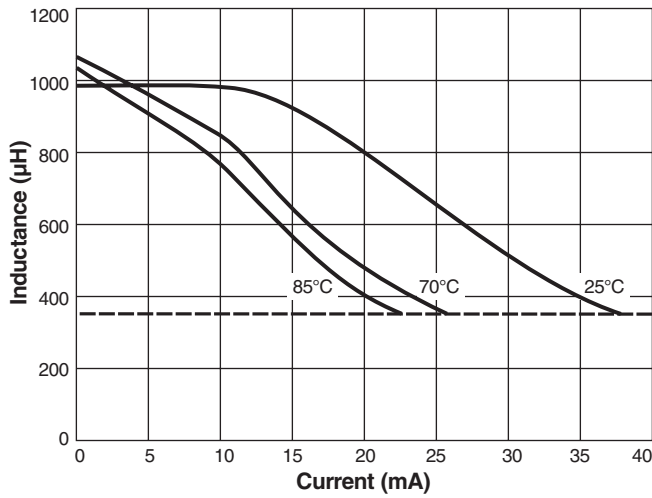
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).



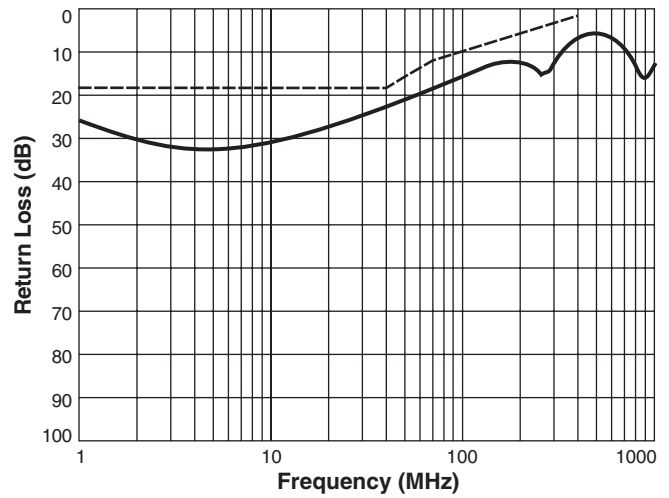


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L vs Offset Current

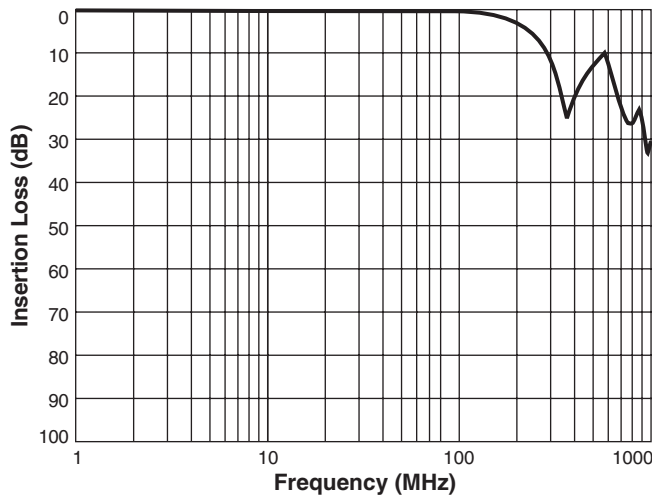


Return Loss



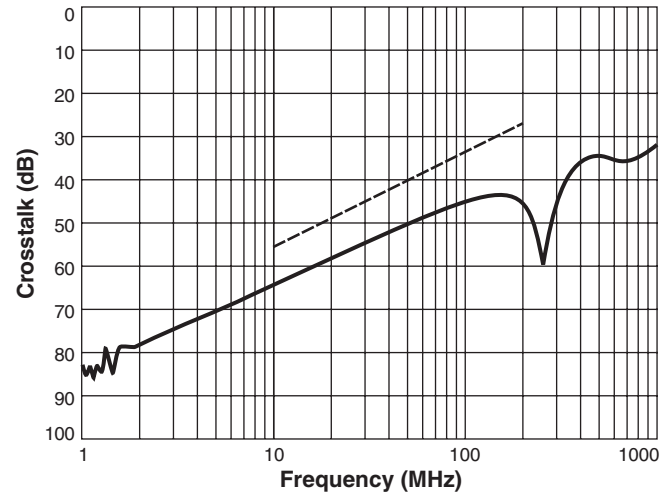
802.3af specification:
 18 dB min from 1 MHz to 40 MHz
 16 dB min at 50 MHz
 12 dB min at 80 MHz
 10 dB min at 100 MHz

Insertion Loss



802.3af specification:
 1.0 min dB from 0.1 MHz to 100 MHz
 1.2 min dB at 125 MHz

Crosstalk



802.3af specification:
 45 dB min at 30 MHz
 40 dB min at 60 MHz
 33 dB min at 100 MHz



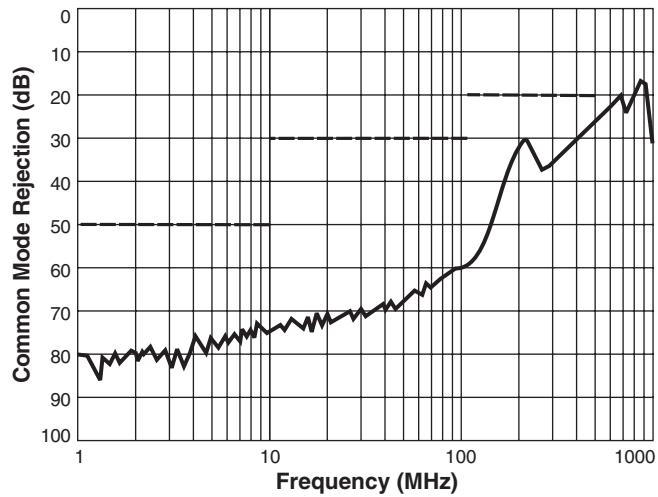
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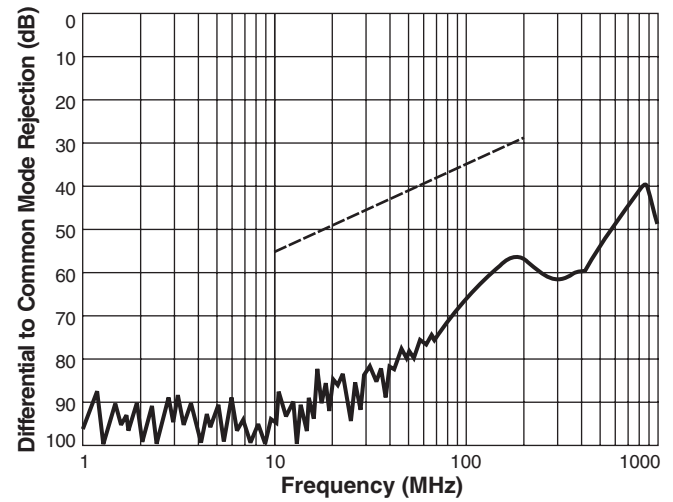
“PoE Plus” Magnetics

Common Mode Rejection



802.3af specification:
 50 dB min from 1 MHz to 10 MHz
 30 dB min from 10 MHz to 125 MHz
 20 dB min from 125 MHz to 500 MHz

Differential to Common Mode Rejection



802.3af specification:
 45 dB min at 30 MHz
 40 dB min at 60 MHz
 35 dB min at 100 MHz



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Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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