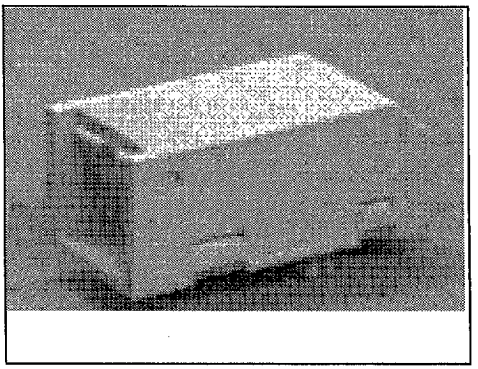
UNDER DEVELOPMENT

HFM2650-001

Small Form Factor Short Wavelength Gigabit Transceiver

FEATURES

- Small Form Factor, high density interconnect.
- Low cost, high reliability, fiber optic-to-electronic solution
- Capable of operating with IEEE Gigabit Ethernet (1.25 Gb/s) Standard for 850nm short wavelength.
- Capable of operation in Fibre Channel (1.062 Gb/s) applications.
- 1X9 pin package footprint
- Fibre Channel Association standardized "SG" Connector
- Transmit and receiver functions built into a single package.



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DESCRIPTION

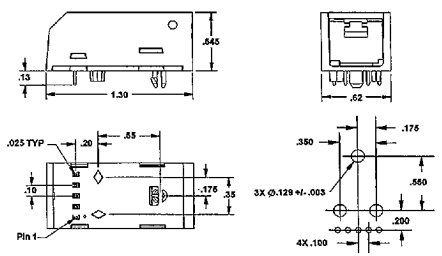
The HFM2650-001 fiber optic transceiver module is intended to provide a low cost solution to the requirements of high speed, intra-building interconnects over multimode fiber optic cable. The module is intended for the short wavelength Gigabit Ethernet and Fibre Channel protocols. Typical uses include LAN interconnect, clustered workstation links, and connections to mass storage devices.

The module is designed and tested to meet short wavelength link distance requirements (300m in 62.5/125 micron fiber and 550m in 50/125 micron fiber). The emitted optical power levels are within Class I operating limits as defined by both CDRH and IEC825-1 for a center wavelength from 830 nm to 860 nm. Because the transceiver is designed to be inherently eye safe, it does not require open fiber control thus eliminating complex electronics or mechanics.

The HFM2650-001 consists of independent Transmitter (TX) and Receiver (RX) functions combined in a single module housing. The transmitter consists of a high reliability 850nm Vertical Cavity Surface Emitting Laser (VCSEL) which couples to a fiber optic cable through an SG connector. The Transmitter is driven with a differential PECL signal applied to TX In+ and TX In-. This signal is converted to an appropriate modulation current by a silicon bipolar laser driver IC.

The optical receiver consists of a PIN photodiode and preamp assembly and a limiting post-amplifier IC. Optical input is coupled to the receiver with either a 50/125 or a 62.5/125 micron fiber through an SG (VF45) connector. Output from the module consists of differential PECL data signals on RX Out+ and RX Out- and a PECL signal detect function RX Signal Detect.

OUTLINE DIMENSIONS in inches (mm)



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Honeywell