

### Features and Benefits

- Trade name for Molex, RJ-45 Jack that includes wire wound components (magnetics)
- Used for local area networks (LANs) or wide area networks (WANs) with Ethernet 10 Base T or 100 Base T characteristics
- Transformers are used in every port to enable series signal isolation of the transmission lines
- Common mode chokes are incorporated in the same transformer core to achieve a better signal-to-noise ratio
- Magnetics are used for common mode noise rejection, DC insulation of cable side versus the board side and possible transforming of LH signal
- Resistors and/or capacitors are incorporated to terminate noise from the non used pair
- An overmolded installation box in the jack is used to mount, solder, pot magnetics, resistors, and capacitors during high volume production



