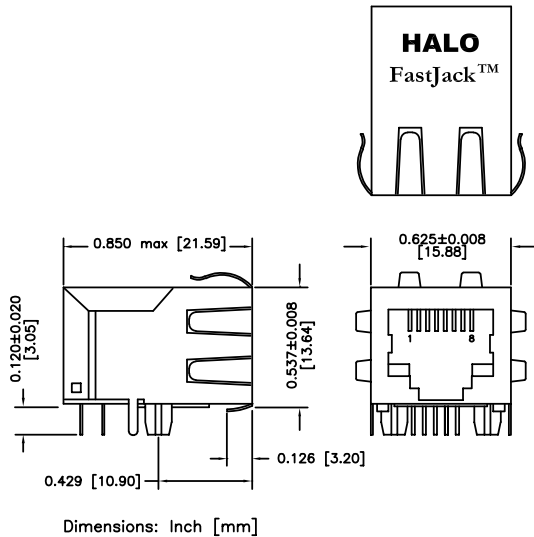


HALO FastJack™ Single Port ELECTRONICS, INC. 10/100BASE-TX RJ-45 Connectors

HALO is pleased to offer this complete range of single port Integrated RJ-45 connectors. The FastJack™ series integrates the high performance of HALO magnetics into an industry standard connector design. The result is an extremely robust, IEEE802.3 compliant, solution. Single and multi-port FastJacks™ are available for most 10BASE-T and 10/100BASE-TX IC's.



Mechanical Drawing

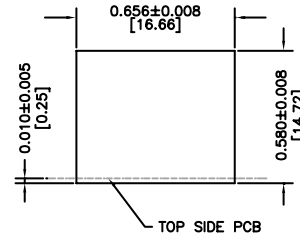


Transformer Electrical Specifications @25°C
 Isolation: 1,500 Vrms
 OCL @100KHz, 8mA: 350 μH min
 CMR (0.1-100MHz): -40dB typ
 Crosstalk (0.1-100MHz): -40dB min

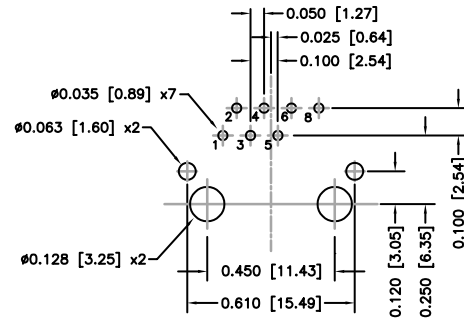


RoHS compliant versions are available.
 Specify RoHS compliant product by adding the suffix "RL".

Recommended Panel Cut-out



Recommended PCB Layout



(Pin 7 omitted except for HFJ11-LG1G)

10/100BASE-TX

| FastJack™, Full Flexibility Schematics | | | Turns Ratio | |
|--|-------------|-------------|-------------|-----|
| Circuit B | Circuit C | Circuit D | TX | RX |
| HFJ11-S050E | HFJ11-2250E | HFJ11-2450E | 1:1 | 1:1 |
| HFJ11-S120E | HFJ11-2220E | HFJ11-2420E | 2:1 | 1:1 |
| HFJ11-S141E | HFJ11-2241E | HFJ11-2441E | 1:1.41 | 1:1 |
| HFJ11-S131E | HFJ11-2231E | HFJ11-2431E | 1.41:1 | 1:1 |
| HFJ11-S139E | HFJ11-2239E | HFJ11-2439E | 1.25:1 | 1:1 |

High Frequency, CMR Chokes

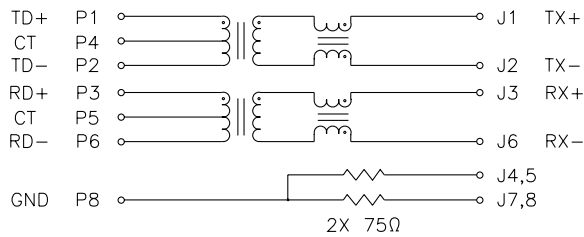
| FastJack™ P/N | Circuit | Turns Ratio |
|---------------|---------|--------------------|
| HFJ11-LG1GE | E | 1:1, 1:1, 1:1, 1:1 |

- LED options are also available. Please refer to the [LED option data sheet](#) for more information.
- Please see individual data sheets for complete electrical specifications.

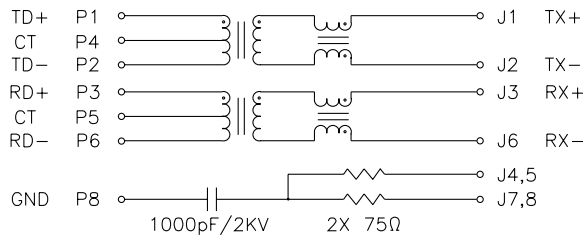
HALO is pleased to offer this complete range of single port Integrated RJ-45 connectors. The FastJack™ series integrates the high performance of HALO magnetics into an industry standard connector design. The result is an extremely robust, IEEE802.3 compliant, solution. Single and multi-port FastJacks™ are available for most 10BASE-T and 10/100BASE-TX IC's.



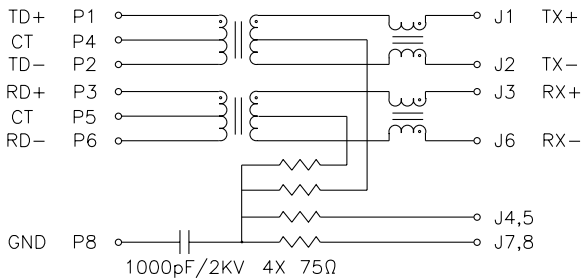
**Circuit B
Low Cost 10/100BASE-TX**



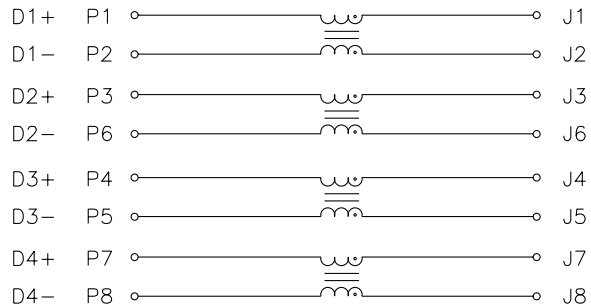
**Circuit C
10/100 BASE-TX**



**Circuit D
10/100BASE-TX**



**Circuit E
CMR Chokes**



Please see individual data sheets for complete electrical specifications.

10BASE-T

| Vendor | Silicon P / N | FastJack™ Part Number | | |
|--------------|----------------------------------|-----------------------|-------------|-----------------|
| | | Single | Ganged* | Stacked/Ganged* |
| AMD | Am79C984A, 985, 988A, 989 | HFJ11-1081E | HFJ1x-1081E | HFJ2x-1081E |
| Cirrus Logic | CS8900-CQ/IQ, CS8920, CS8904-CM5 | HFJ11-1043E | HFJ1x-1043E | HFJ2x-1043E |
| Cirrus Logic | CS8900-CQ3/IQ3, CS8904-CM3 | HFJ11-1041E | HFJ1x-1041E | HFJ2x-1041E |
| Intel | LXT901/1A, 907/7A, LXT914/915 | HFJ11-1043E | HFJ1x-1043E | HFJ2x-1043E |
| Intel | LXT905, LXT908 | HFJ11-1075E | HFJ1x-1075E | HFJ2x-1075E |
| LSI | 80C24/25 | HFJ11-1066E | HFJ1x-1066E | HFJ2x-1066E |
| NSC | DP83907, DP83953 | HFJ11-1086E | HFJ1x-1086E | HFJ2x-1086E |
| RealTek | RTL8019 | HFJ11-S101E | - | - |
| SMSC | LAN91C95/96 (5V) | HFJ11-S101E | - | - |
| SMSC | LAN91C96 (3.3V) | HFJ11-S114E | - | - |
| Ubicom | IP2022 | HFJ11-S114E | - | - |

10/100BASE-TX

| Vendor | Silicon P / N | FastJack™ Part Number | | |
|----------|-------------------------------------|-----------------------|-------------|-----------------|
| | | Single | Ganged* | Stacked/Ganged* |
| AMD | 79C873/4/5 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| AMD | 79C973/5 | HFJ11-2441E | HFJ1x-2441E | HFJ2x-2441E |
| ASIX | AX88796L | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| Broadcom | AC101, AC104, AC205/6/7/8 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| Broadcom | BCM52xx, BCM531x | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| Crystal | CS8952 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| Davicom | DM9000 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| IDT | QS6611 | HFJ11-2431E | HFJ1x-2431E | HFJ2x-2431E |
| IDT | QS6612 | HFJ11-2439E | HFJ1x-2439E | HFJ2x-2439E |
| Intel | 82558/9, LXT970/1/2/3, LXT976X/978X | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| Intel | LXT974A, LXT975A, LXT980/2/3 | HFJ11-2420E | HFJ1x-2420E | HFJ2x-2420E |
| Kendin | KS8761 | HFJ11-2431E | HFJ1x-2431E | HFJ2x-2431E |
| Kendin | KS8721, KS8737, KS899x | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| LSI | 80C220/80C221 | HFJ11-2420E | HFJ1x-2420E | HFJ2x-2420E |
| LSI | 80223/84220 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| Marvell | 88E3061/81/82/83, 88E6050/1/2 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| Marvell | 88E6021, 88E6023 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| NSC | DP83223/83843/83846A/83847 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| RealTek | RTL8139C, RTL8201 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| SMSC | LAN91C111, LAN91C113 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| ST Micro | STE10/100A, STE100P | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| ST Micro | STE400P, STE800P* | HFJ11-2431E | HFJ1x-2431E | HFJ2x-2431E |
| TDK | 78Q2120/1 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |
| T.I. | TNETE2101 | HFJ11-2450E | HFJ1x-2450E | HFJ2x-2450E |

* For Ganged and Stacked/Ganged connectors replace x with the number of ports per row.