HALO
ELECTRONICS, INC.

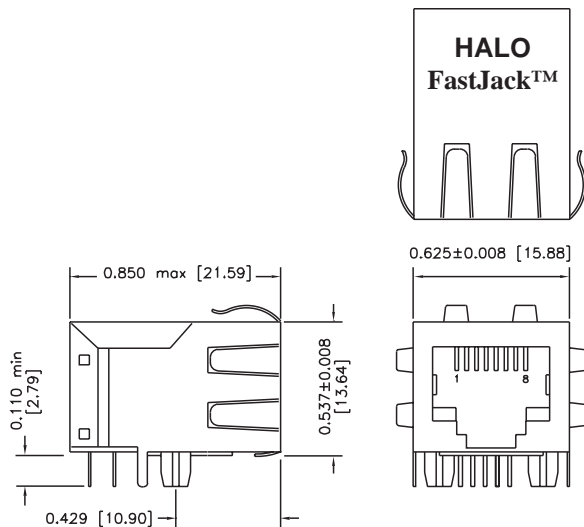# FastJack™ Single Port
10/100BASE-TX RJ-45 Connectors

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

HALO
FastJack™

0.625±0.008 [15.88]

0.850 max [21.59]

0.110 min [2.79]

0.537±0.008 [13.64]

0.429 [10.90]

1   8

Recommended Panel Cut-out

0.656±0.008 [16.66]

0.010±0.005 [0.25]

0.580±0.008 [14.72]

TOP SIDE PCB

Recommended PCB Layout

0.050 [1.27]
0.025 [0.64]
0.100 [2.54]
0.100 [2.54]

Ø0.035 [0.89] x7

Ø0.063 [1.60] x2

Ø0.128 [3.25] x2

2 4 6 8
1 3 5 7

0.450 [11.43]
0.610 [15.49]

0.120 [3.05]
0.250 [6.35]
0.100 [2.54]

(Pin 7 ommitted except for HFJ11-LG1G)
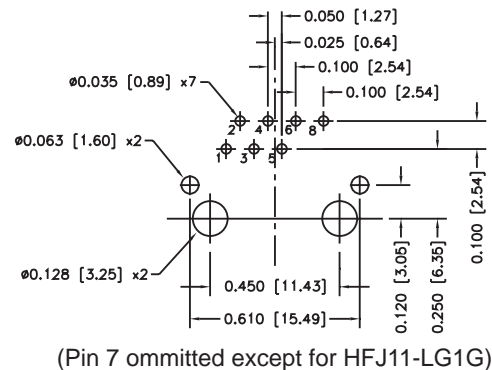
Transformer Electrical Specifications @25°C
Isolation: 1,500 Vrms
OCL @100KHz, 8mA: 350 µH min
CMR (0.1-100MHz):   -40dB typ
Crosstalk (0.1-100MHz):   -40dB min
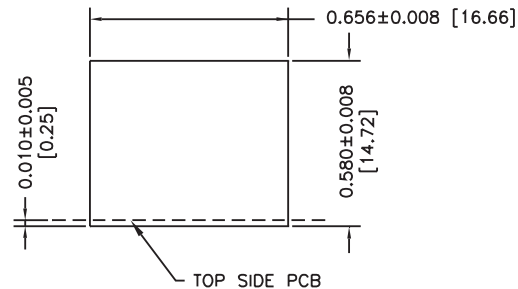
10/100BASE-TX

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

1. LED options are also available. Please refer to the LED option data sheet for more information.
2. Please see individual data sheets for complete electrical specifications.

FastJack™ Single Port
# 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.
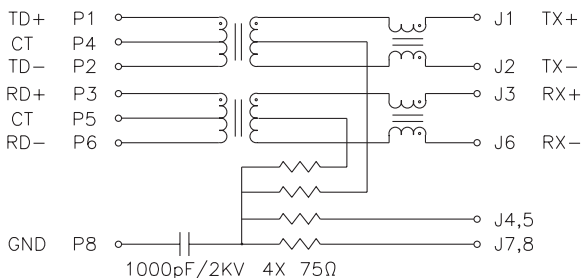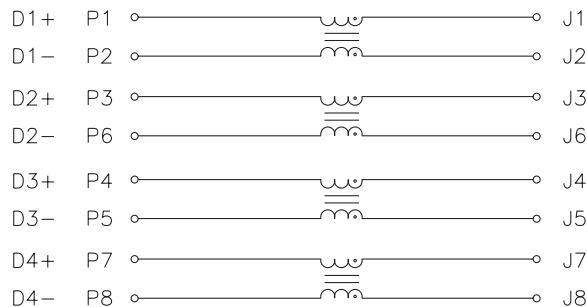
Circuit B
Low Cost 10/100BASE-TX
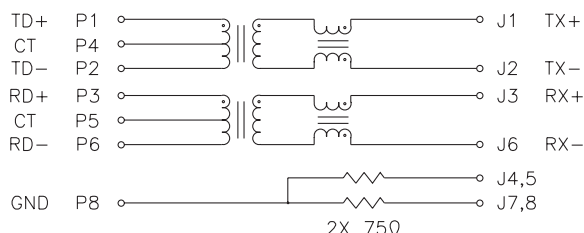
Circuit C
10/100 BASE-TX
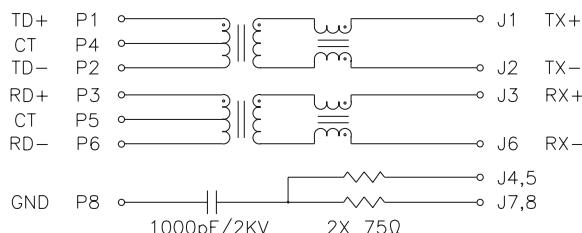
Circuit D
10/100BASE-TX

Circuit E
CMR Chokes

Please see individual data sheets for complete electrical specifications.

FastJack™ Selector Guide

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.