

## CTRJG Series 10/100/1000 Gigabit Ethernet RJ45 Integrated Modular Jack

### CHARACTERISTICS

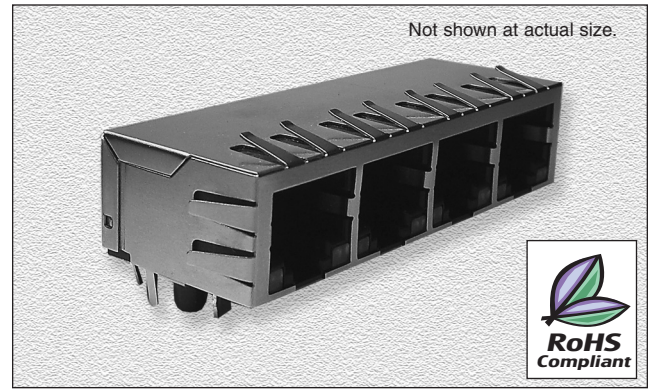
Options: 1x2, 1x4, 1x6, 1x8 & 2x1, 2x4, 2x6, 2x8 Port  
 Meets or exceeds IEEE 802.3 standard for 10/100/1000 Base-TX  
 Suitable for CAT 5 & 6 Fast Ethernet Cable of better UTP  
 350  $\mu$ H minimum OCL with 8mA DC bias current  
 Available with or without LEDs  
 Minimum 1500Vrms isolation per IEEE 802.3 requirement  
 Operating temperature 0°C to +70°C  
 Storage temperature -40°C to +85°C

RoHS Compliant

Transformer electrical specifications @ 25°C

### MATERIAL SPECIFICATION

**Metal Shell:** Copper Alloy, Finish: 50 $\mu$ " Nickel  
**Housing:** Thermoplastic, UL 94V-0, Color Black  
**Insert:** Thermoplastic, UL 94V-0, Color Black  
 Contact Terminal / Phosphor Bronze, 15 $\mu$ " Gold on Contact Area,  
 100 $\mu$ " Tin on Solder, Both over 50 $\mu$ ", Nickel Under-Plated  
**Coil Base:** Phenolic/LCP, UL 94V-0, Color Black



### PART NUMBER CONFIGURATION

Series	Size Code	Layers	Port (Each Layer)	LED (L/R)	Tab	Schematic
CTRJG	26	S = Single	1	N = None	N = N/A	1001A, 1002A
	29	D = Double	2	G = Green	D = Down	1003A, 1012A
	31		4	Y = Yellow	U = Up	1013A, 1012B
	33		6	O = Orange		1015B, 1223C
8					1224C, 1226C	
						1227C, 1013D
						1015D

Single Layer: CTRJG 26 S 1 GY U 1001A  
 Double Layer: CTRJG 31 D 1 GONN N 1013D

### LED CONFIGURATION

Schematic	Standard LED	Wavelength ( $\lambda$ )	V / IF= 20 mA		Image
			Max.	Typ.	
1001A 1002A 1003A 1012A 1013A	Yellow	585nm	2.5V	2.1V	Left LED: P14, P13 Right LED: P12, P11
	Green	570nm	2.5V	2.1V	
	Orange	605nm	2.5V	2.1V	
1012B 1015B	Yellow	585nm	2.5V	2.1V	Left LED: P12, P11 Right LED: P14, P13
	Green	570nm	2.5V	2.1V	
1223C 1224C 1226C 1227C	Yellow	585nm	2.5V	2.1V	Left LED: P16, P15 Right LED: P14, P13
	Green	570nm	2.5V	2.1V	
	Orange	605nm	2.5V	2.1V	
1013D 1015D	Green	570nm	2.5V	2.1V	LEDs: Green, Orange P11, P12
	Orange	605nm	2.5V	2.1V	

06.06.07

## CTRJG Series

### ORDERING INFO

Part Number	Turns Ratio TD1/2/3/4	EMI Fingers	LEDs (L/R)	LEDs (U/D)	Insertion Loss (dB max.)			Return Loss 100Ω ± 15Ω (dB min.)				Cross Talk (dB min.)			C.M.R. (dB min)		Hi-pot (Vrms) 60HZ/1 min.
					1-100 MHz	1-125 MHz	100-125 MHz	1-30 MHz	1-60 MHz	60-80 MHz	80-100 MHz	1-30 MHz	1-60 MHz	60-100 MHz	1-60 MHz	60-100 MHz	
CTRJG26S1GYU1001A	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GGU1001A	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1YGU1001A	1CT:1CT	YES	Y/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GYU1002A	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GGU1002A	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1YGU1002A	1CT:1CT	YES	Y/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GYU1003A	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GGU1003A	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1YGU1003A	1CT:1CT	YES	Y/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GYU1012A	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GGU1012A	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1YGU1012A	1CT:1CT	YES	Y/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GYU1013A	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1GGU1013A	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S1YGU1013A	1CT:1CT	YES	Y/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S2GYU1012B	1CT:1CT	-	G/Y	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S2GGU1012B	1CT:1CT	-	G/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S2YGU1012B	1CT:1CT	-	Y/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S2GYU1015B	1CT:1CT	-	G/Y	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S2GGU1015B	1CT:1CT	-	G/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S2YGU1015B	1CT:1CT	-	Y/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S4GYU1012B	1CT:1CT	-	G/Y	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S4GGU1012B	1CT:1CT	-	G/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S4YGU1012B	1CT:1CT	-	Y/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S4GYU1015B	1CT:1CT	-	G/Y	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S4GGU1015B	1CT:1CT	-	G/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S4YGU1015B	1CT:1CT	-	Y/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S6GYU1012B	1CT:1CT	-	G/Y	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S6GGU1012B	1CT:1CT	-	G/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S6YGU1012B	1CT:1CT	-	Y/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S6GYU1015B	1CT:1CT	-	G/Y	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S6GGU1015B	1CT:1CT	-	G/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S6YGU1015B	1CT:1CT	-	Y/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S8GYU1012B	1CT:1CT	-	G/Y	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S8GGU1012B	1CT:1CT	-	G/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S8YGU1012B	1CT:1CT	-	Y/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S8GYU1015B	1CT:1CT	-	G/Y	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S8GGU1015B	1CT:1CT	-	G/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG26S8YGU1015B	1CT:1CT	-	Y/G	-	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GYU1223C	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GGU1223C	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1YGU1223C	1CT:1CT	YES	Y/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GYU1224C	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GGU1224C	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1YGU1224C	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GYU1226C	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GGU1226C	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1YGU1226C	1CT:1CT	YES	Y/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GYU1227C	1CT:1CT	YES	G/Y	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GGU1227C	1CT:1CT	YES	G/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1YGU1227C	1CT:1CT	YES	Y/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG33S1GYU1227C	1CT:1CT	YES	GY/G	-	-	-1.2	-	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG29D1NNN1013D	1CT:1CT	-	-	N/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG29D4NNN1013D	1CT:1CT	-	-	N/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG29D6NNN1013D	1CT:1CT	-	-	N/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG29D8NNN1013D	1CT:1CT	-	-	N/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG29D1NNN1015D	1CT:1CT	-	-	N/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG29D4NNN1015D	1CT:1CT	-	-	N/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG29D6NNN1015D	1CT:1CT	-	-	N/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG29D8NNN1015D	1CT:1CT	-	-	N/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG31D1GONN1013D	1CT:1CT	-	-	GO/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG31D4GONN1013D	1CT:1CT	-	-	GO/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG31D6GONN1013D	1CT:1CT	-	-	GO/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG31D8GONN1013D	1CT:1CT	-	-	GO/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG31D1GONN1015D	1CT:1CT	-	-	GO/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG31D4GONN1015D	1CT:1CT	-	-	GO/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG31D6GONN1015D	1CT:1CT	-	-	GO/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
CTRJG31D8GONN1015D	1CT:1CT	-	-	GO/N	-1.0	-	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500

06.06.07



Manufacturer of Passive and Discrete Semiconductor Components

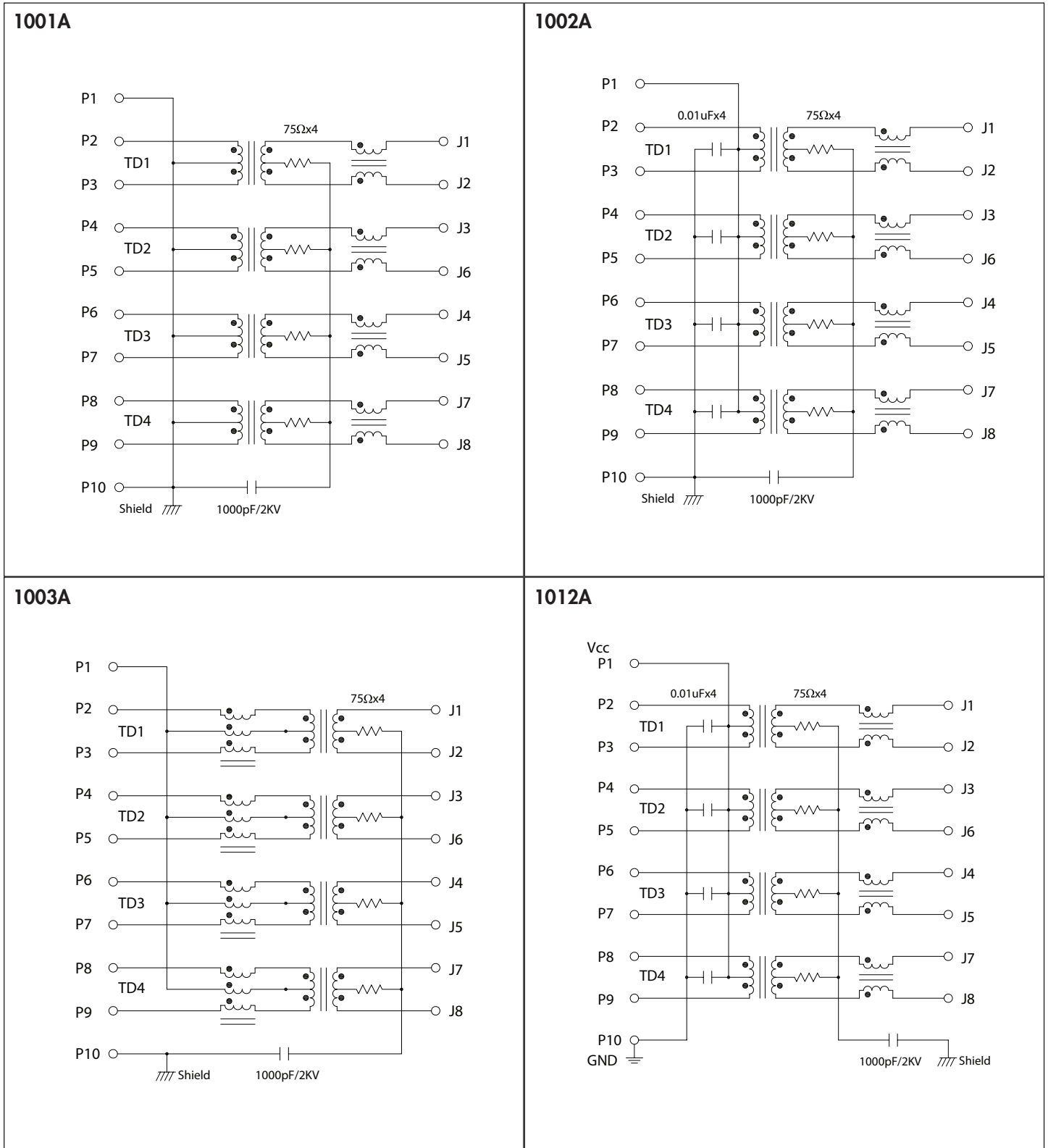
**800-684-5322** Inside US **949-453-1811** Outside US

Copyright © 2006 by CT Magnetics, DBA Central Technologies. All rights reserved.

CT Magnetics reserves the right to make improvements or change specifications without notice

## CTRJG Series

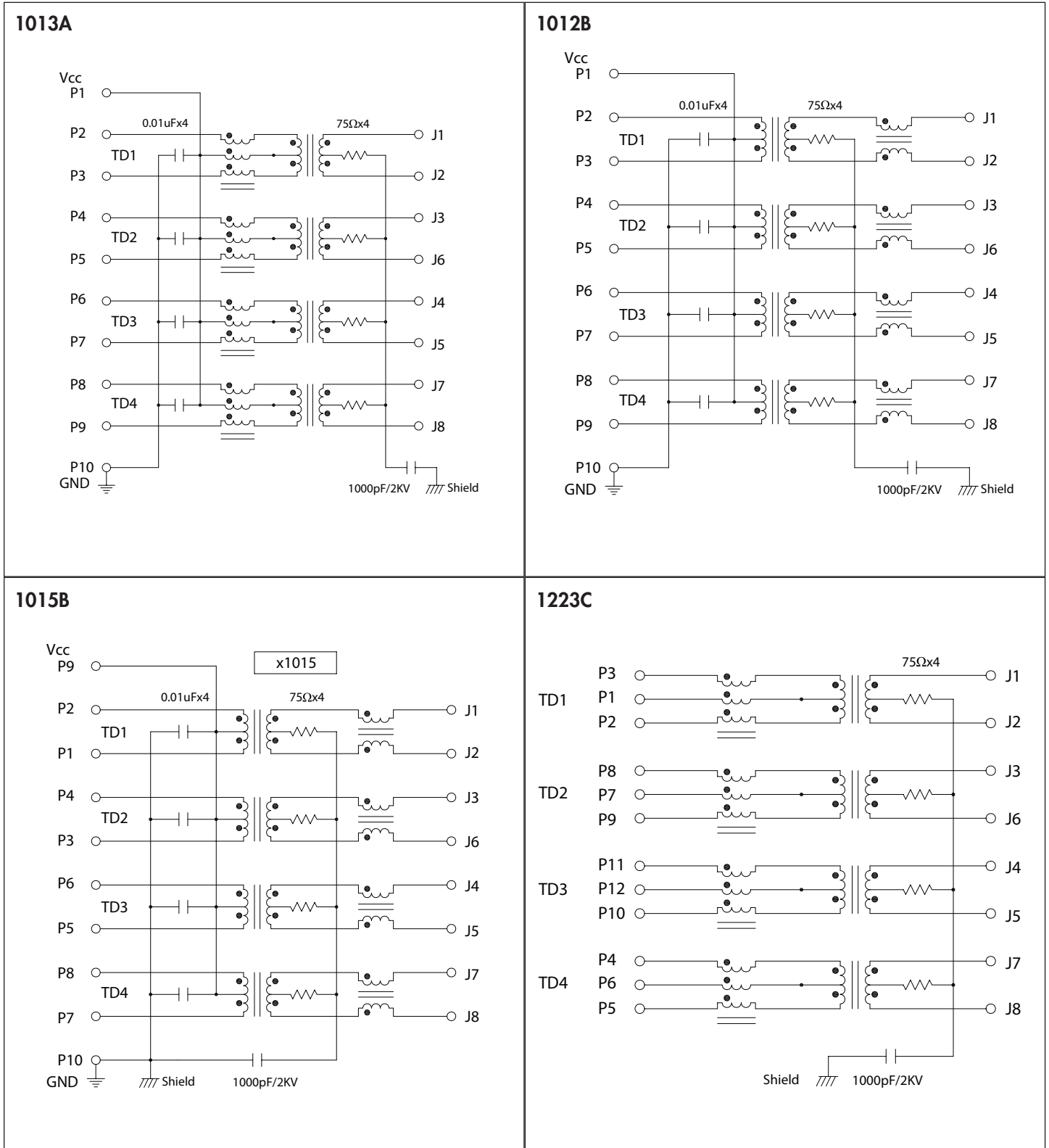
### SCHEMATICS



06.06.07

## CTRJG Series

### SCHEMATICS



06.06.07



Manufacturer of Passive and Discrete Semiconductor Components

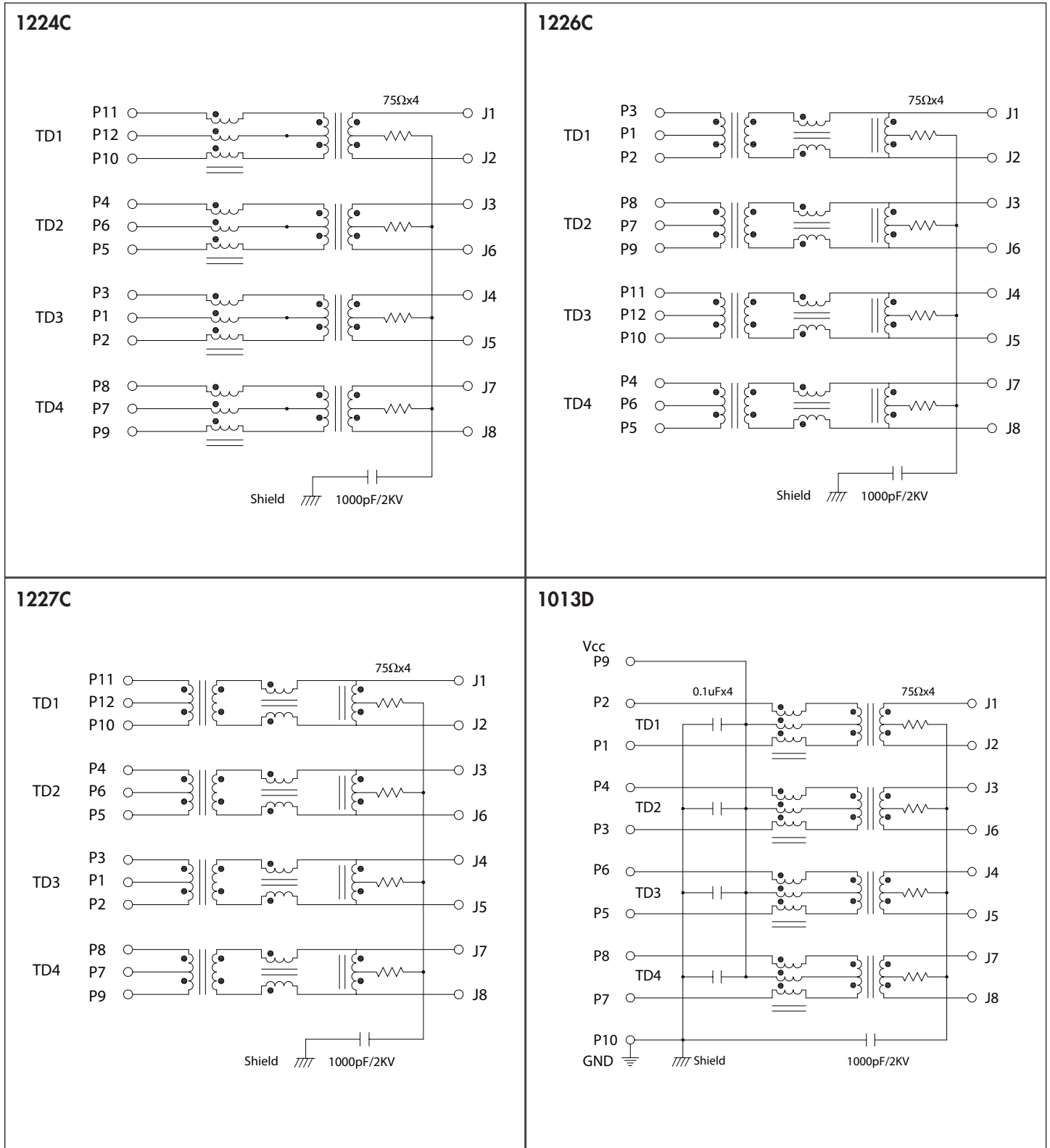
**800-684-5322** Inside US **949-453-1811** Outside US

Copyright © 2006 by CT Magnetics, DBA Central Technologies. All rights reserved.

CT Magnetics reserves the right to make improvements or change specifications without notice

## CTRJG Series

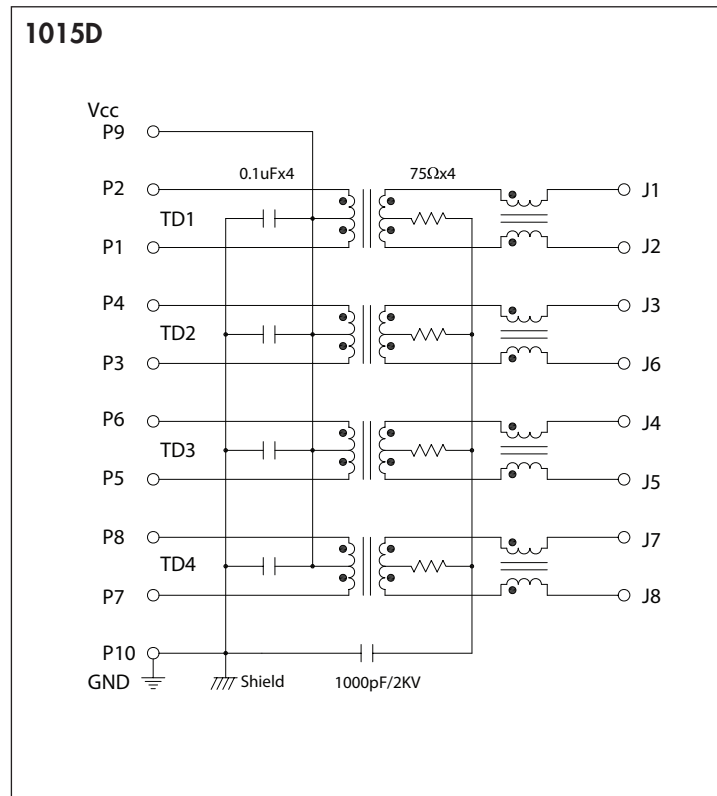
### SCHEMATICS



06.06.07

## CTRJG Series

### SCHEMATICS

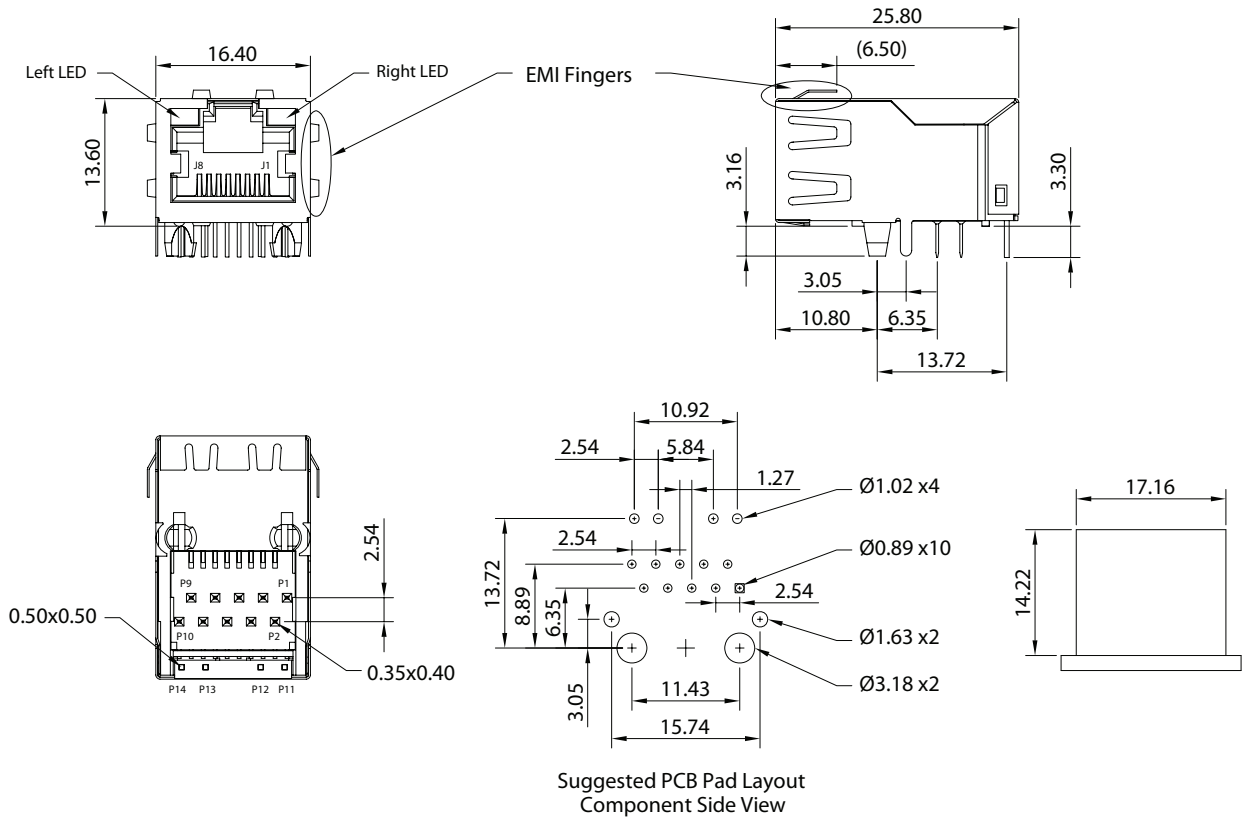


06.06.07

## CTRJG Series

### MECHANICAL

CTRJG26S1xxxxxxx



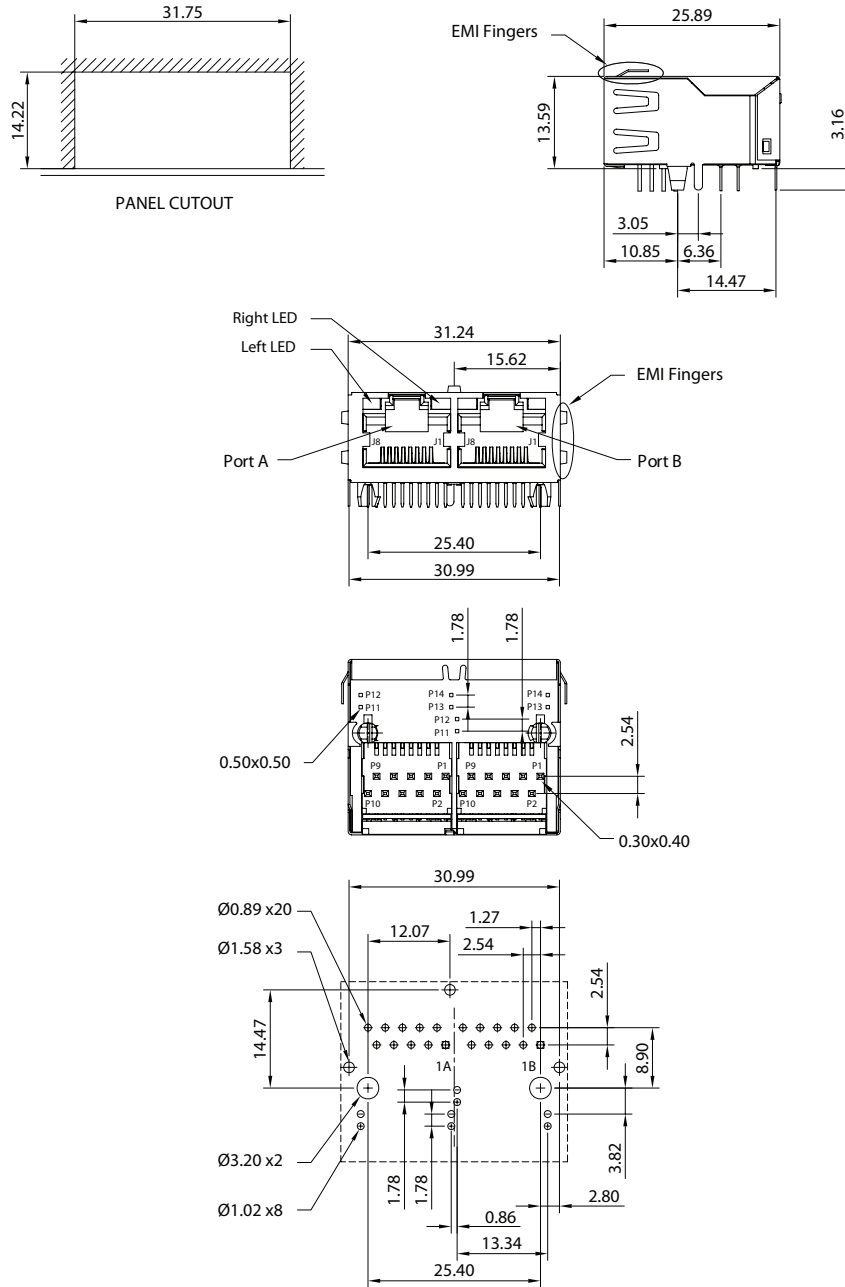
- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
 Connector  $\pm 0.25\text{mm}$   
 2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07

## CTRJG Series

### MECHANICAL

CTRJG26S2xxxxxxx



Suggested PCB Pad Layout  
Component Side View

- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
 Connector  $\pm 0.25\text{mm}$   
 2. Connector dimensions comply with FCC 68.5 dimension requirements

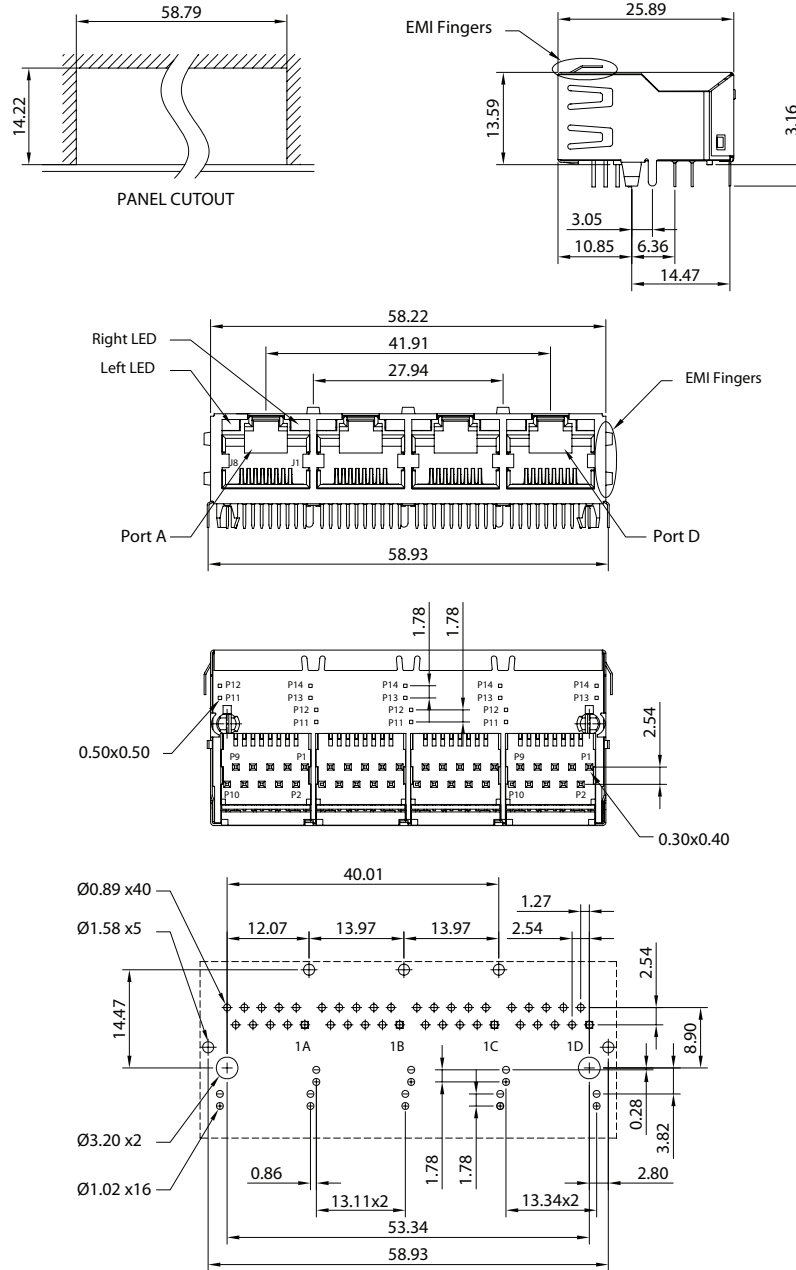
06.06.07



## CTRJG Series

### MECHANICAL

CTRJG26S4xxxxxxx



Suggested PCB Pad Layout  
Component Side View

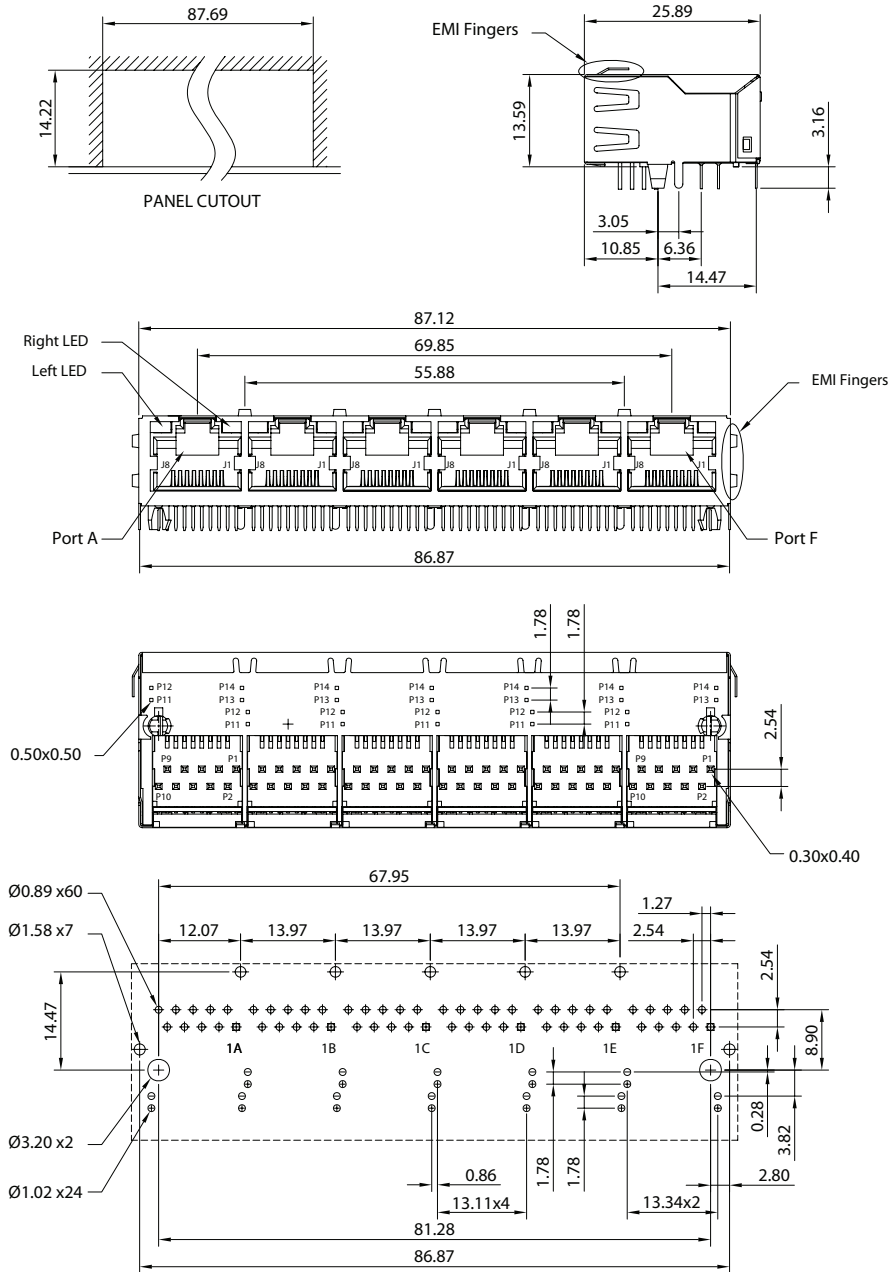
- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
 Connector  $\pm 0.25\text{mm}$   
 2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07

## CTRJG Series

### MECHANICAL

CTRJG26S6xxxxxxx



Suggested PCB Pad Layout  
Component Side View

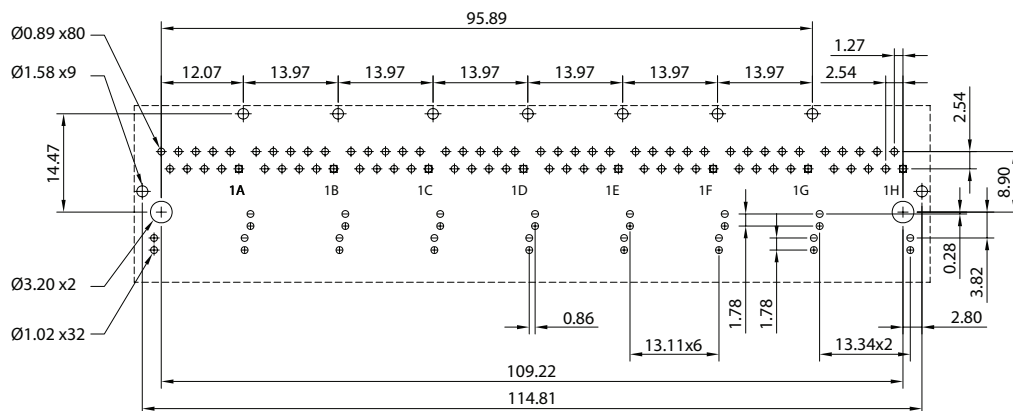
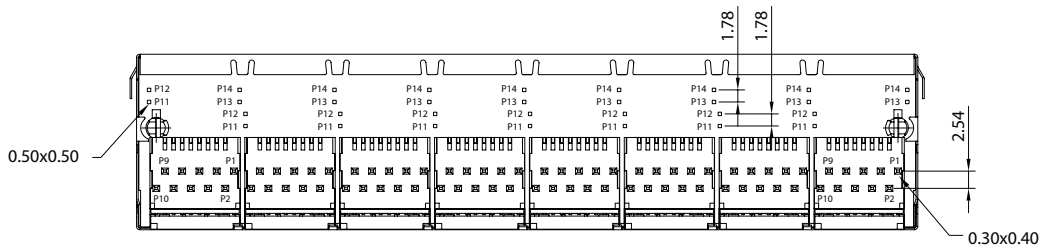
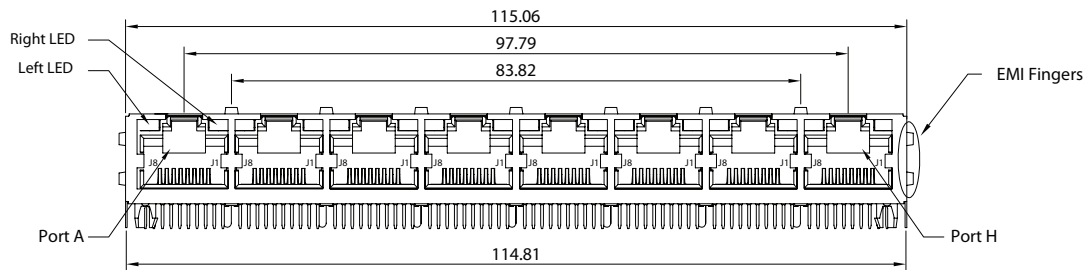
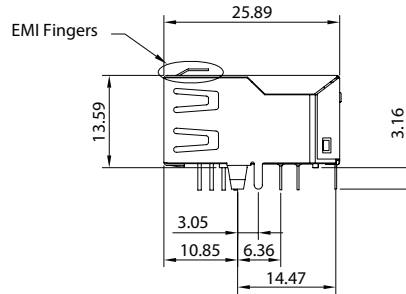
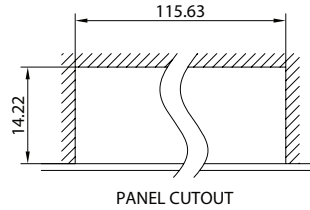
- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
 Connector  $\pm 0.25\text{mm}$   
 2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07

## CTRJG Series

### MECHANICAL

CTRJG26S8xxxxxxx



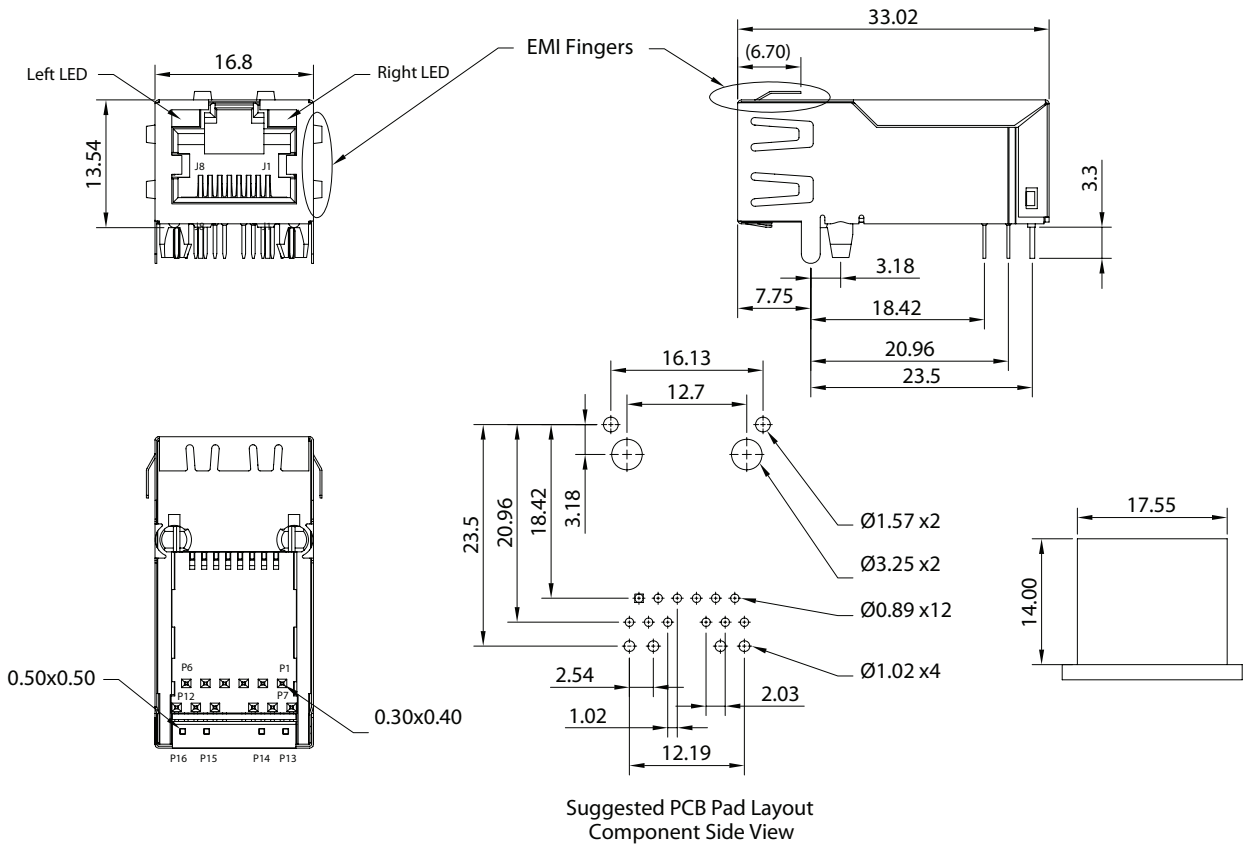
- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
 Connector  $\pm 0.25\text{mm}$   
 2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07

## CTRJG Series

### MECHANICAL

CTRJG3351xxxxxxx



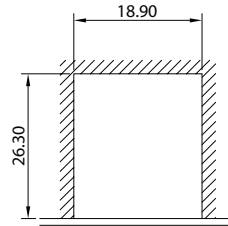
- NOTES : 1. Tolerance : PCB  $\pm 0.05$ mm  
 Connector  $\pm 0.25$ mm  
 2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07

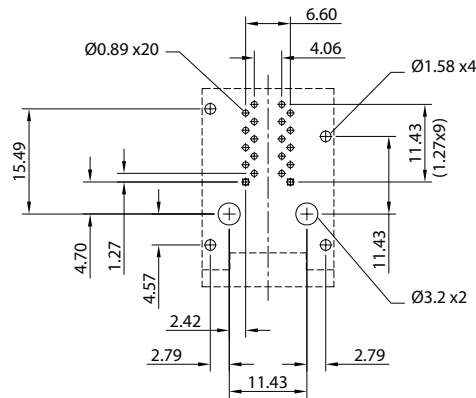
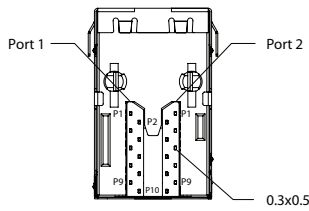
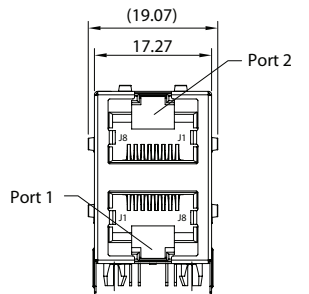
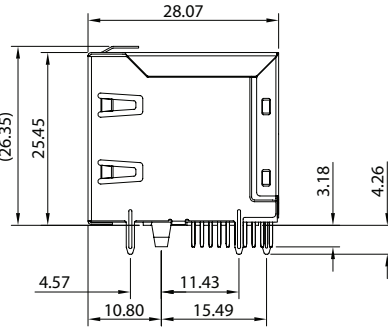
## CTRJG Series

### MECHANICAL

CTRJG29D1xxxxxxx



PANEL CUT OUT



Suggested PCB Pad Layout  
Component Side View

- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
 Connector  $\pm 0.25\text{mm}$   
 2. Connector dimensions comply with FCC 68.5 dimension requirements

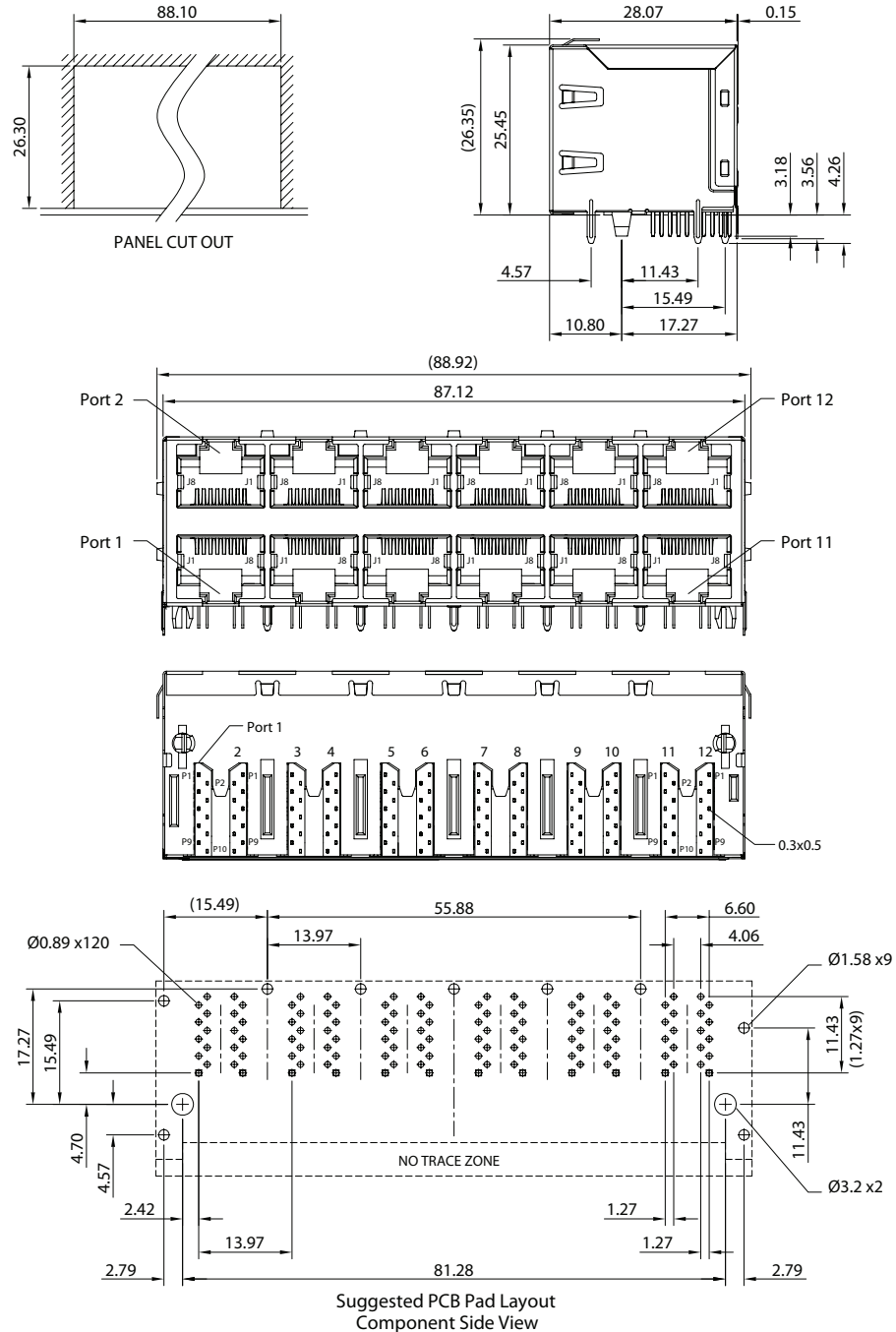
06.06.07



## CTRJG Series

### MECHANICAL

CTRJG29D6xxxxxxx



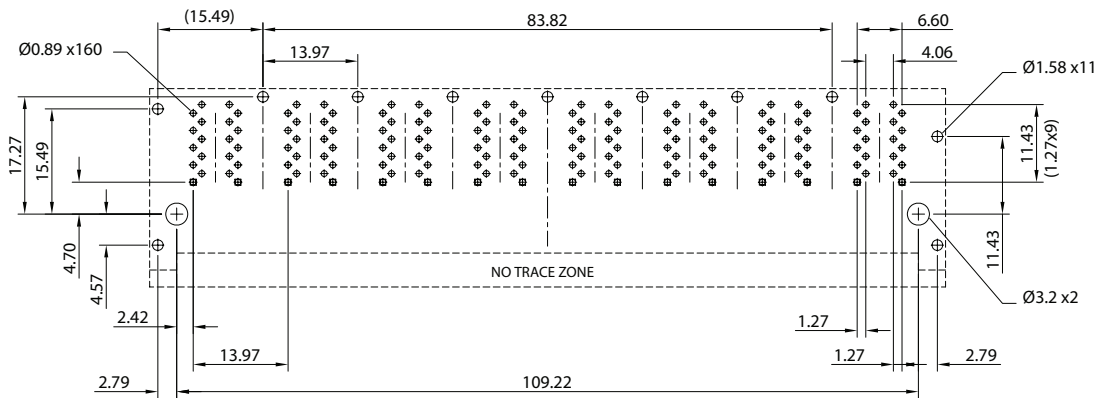
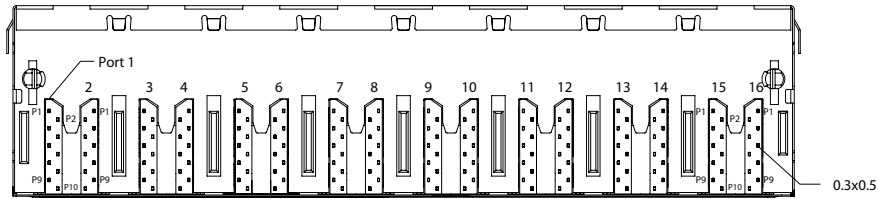
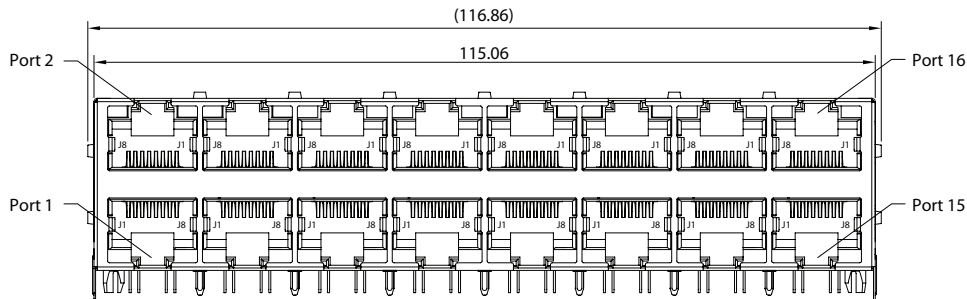
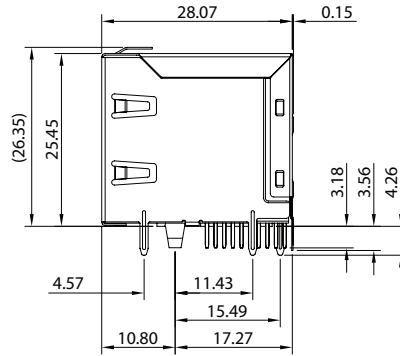
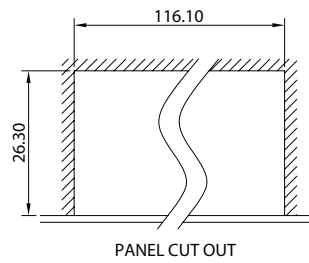
- NOTES : 1. Tolerance : PCB  $\pm 0.05$ mm  
 Connector  $\pm 0.25$ mm  
 2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07

## CTRJG Series

### MECHANICAL

CTRJG29D8xxxxxxx



Suggested PCB Pad Layout  
Component Side View

- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
Connector  $\pm 0.25\text{mm}$   
2. Connector dimensions comply with FCC 68.5 dimension requirements

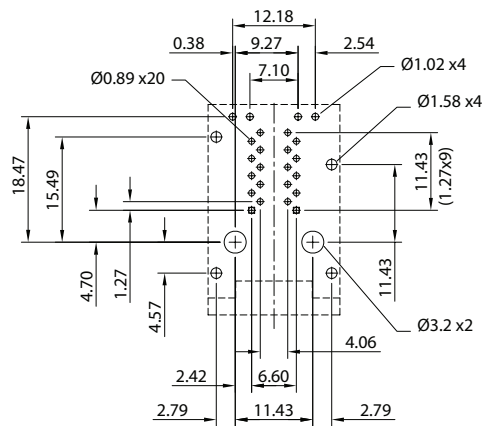
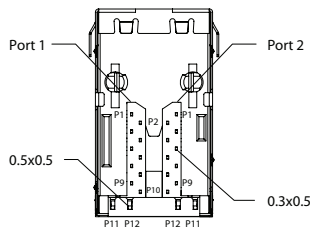
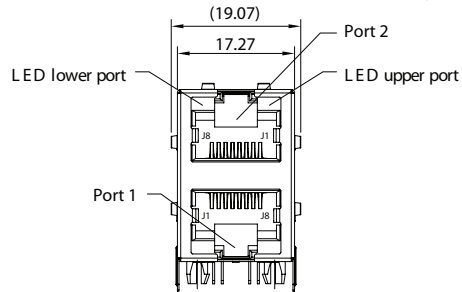
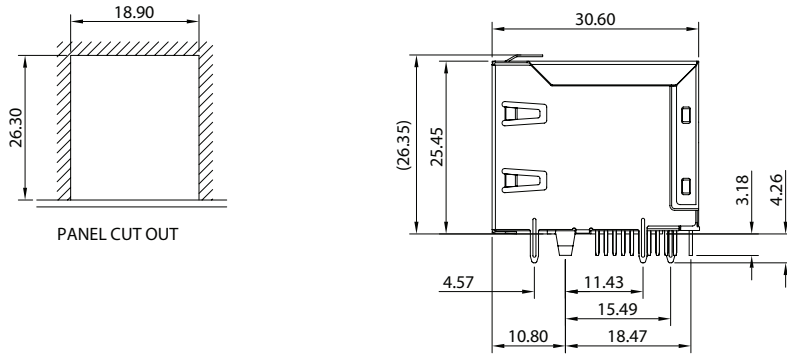
06.06.07



## CTRJG Series

### MECHANICAL

CTRJG31D1xxxxxx



Suggested PCB Pad Layout  
Component Side View

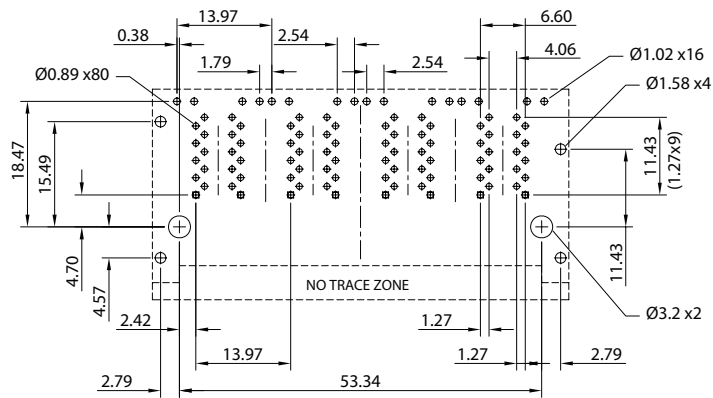
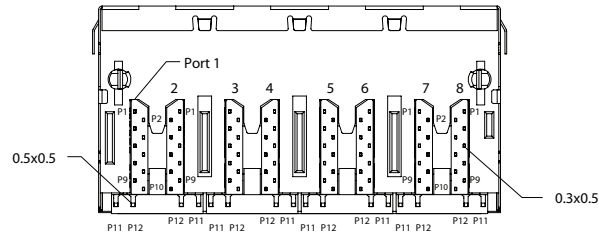
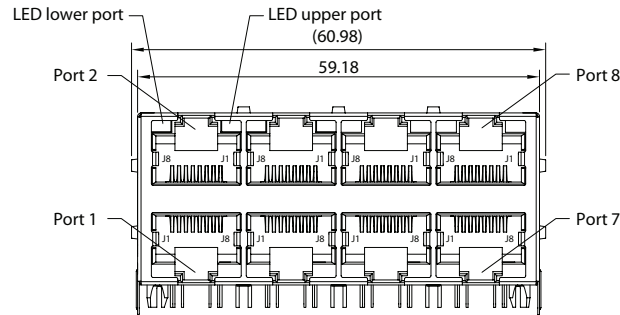
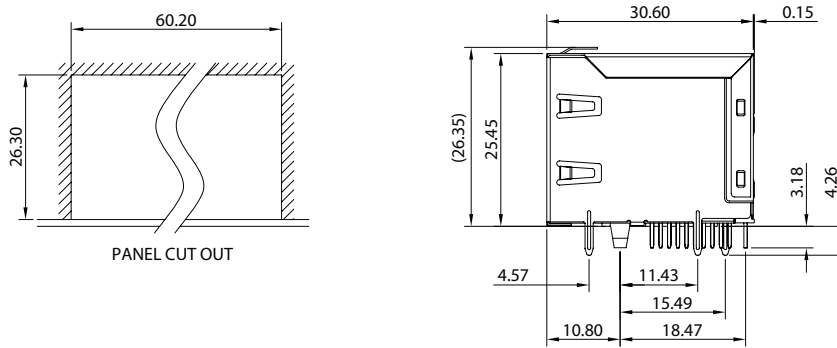
- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
 Connector  $\pm 0.25\text{mm}$   
 2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07

## CTRJG Series

### MECHANICAL

CTRJG31D4xxxxxxx



Suggested PCB Pad Layout  
Component Side View

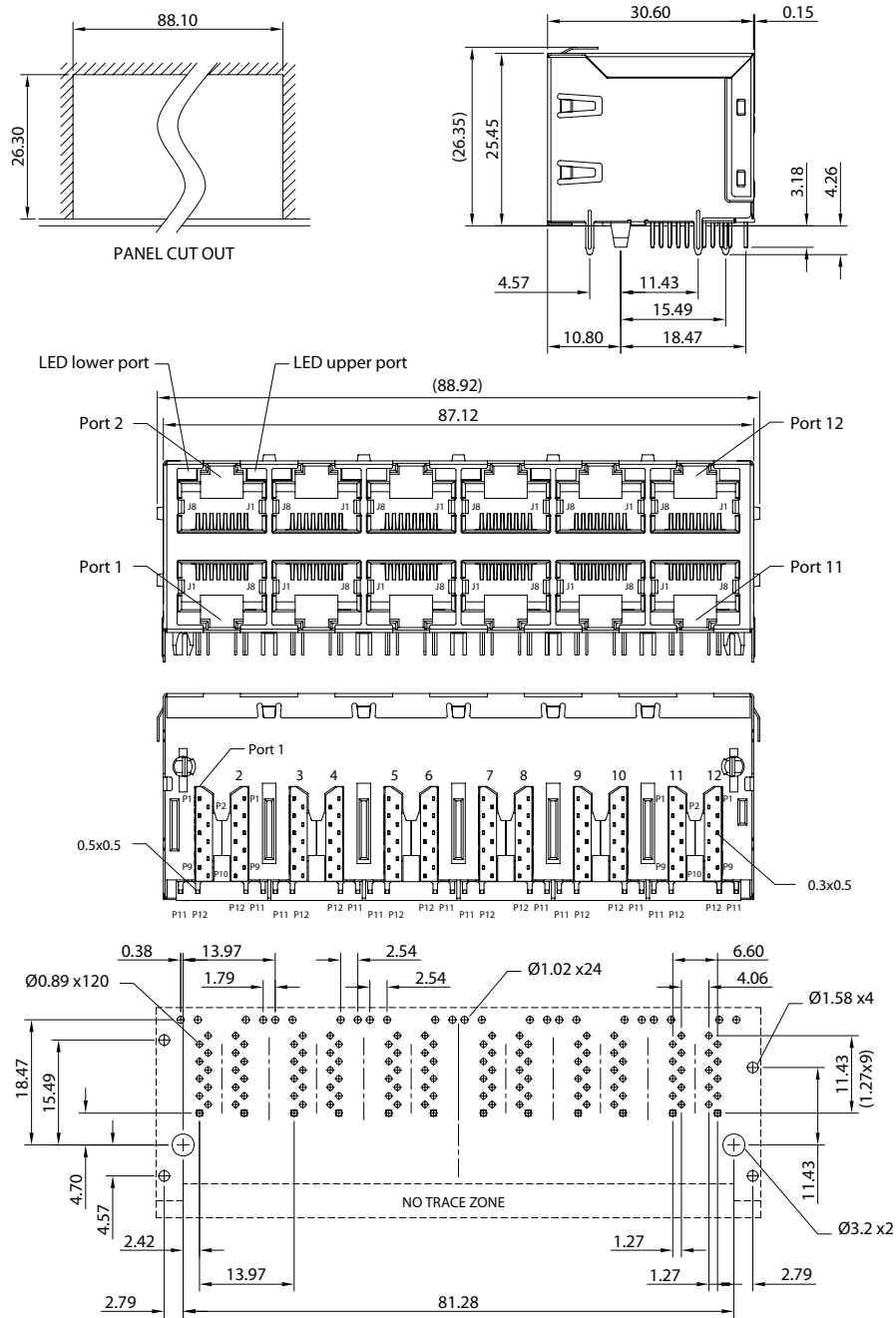
- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
Connector  $\pm 0.25\text{mm}$   
2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07

## CTRJG Series

### MECHANICAL

CTRJG31D6xxxxxxx



NOTES : 1. Tolerance : PCB ±0.05mm  
Connector ±0.25mm

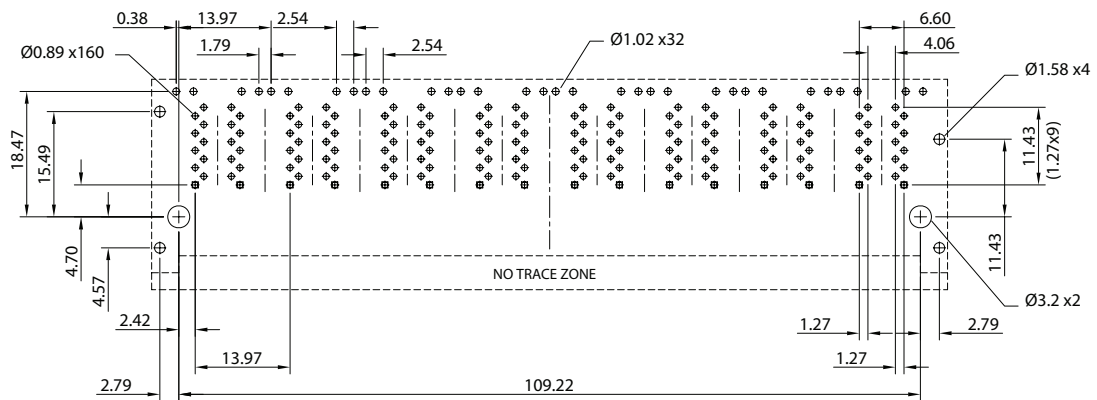
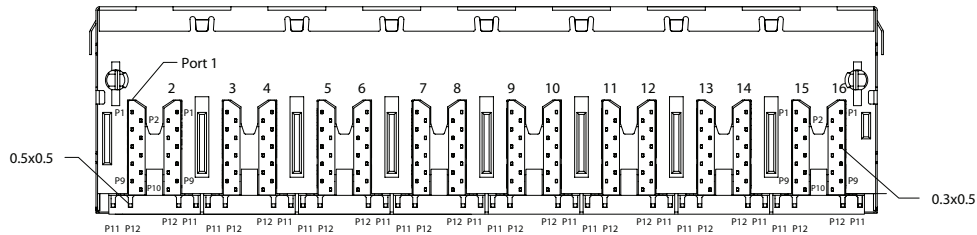
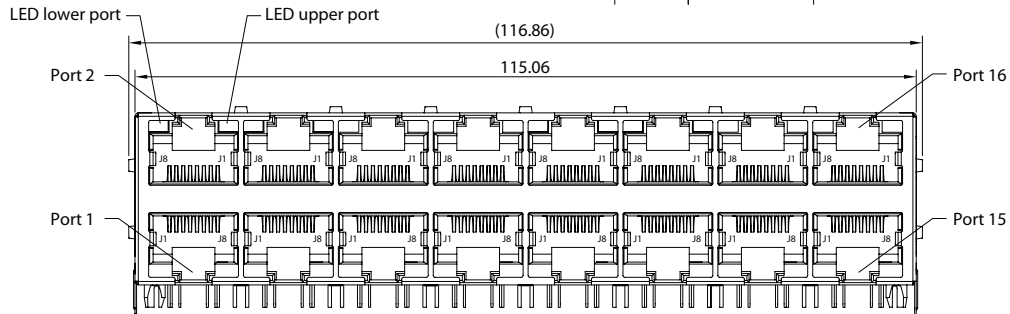
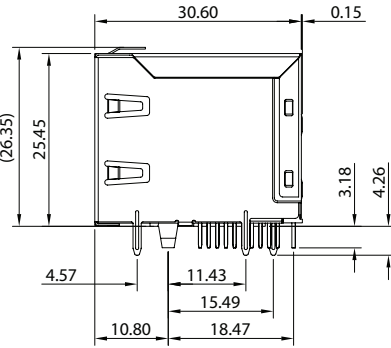
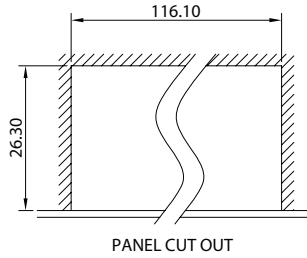
2. Connector dimensions comply with FCC 68.5 dimension requirements

Suggested PCB Pad Layout  
Component Side View

06.06.07

### MECHANICAL

CTRJG31D8xxxxxxx



Suggested PCB Pad Layout  
Component Side View

- NOTES : 1. Tolerance : PCB  $\pm 0.05\text{mm}$   
Connector  $\pm 0.25\text{mm}$   
2. Connector dimensions comply with FCC 68.5 dimension requirements

06.06.07