

INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

Options: 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 or better UTP

Available with or without LEDs

350 uH minimum OCL with 8mA DC bias current

Minimum 1500Vrms isolation per IEEE802.3 requirement

Operating temperature 0°C to +70°C

Storage temperature -40°C to +85°C

Patent No.:

Taiwan - M288027, M287944, file94219539

U.S.A. - file11/274,137 file11/284,812 file11/304,735

Japan - 3119145, 3119556, 3119683

Germany - 20 2005 019 158.2, 20 2005 019 160.4, 20 2005 019 479.4

TRANSFORMER ELECTRICAL SPECIFICATIONS AT 25°C

Part Number	Turns Ratio	LEDs	Insertion Loss (dB max.)		Return Loss 100Ω±15Ω (dB min.)				Cross talk (dB min.)			C.M.R. (dB min.)		Hi - pot (Vrms)
	TD1/2/3/4	(U/D)	1-100 MHz	100-125 MHz	1-30 MHz	30-60 MHz	60-80 MHz	80-100 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-60 MHz	60-100 MHz	60Hz/1min
G29TS-610130A	1CT:1CT	N / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G29TS-710130A	1CT:1CT	N / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G29TS-810130A	1CT:1CT	N / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G29TS-910130A	1CT:1CT	N / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G29TS-610150A	1CT:1CT	N / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G29TS-710150A	1CT:1CT	N / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G29TS-810150A	1CT:1CT	N / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G29TS-910150A	1CT:1CT	N / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G31TS-61013HA	1CT:1CT	GO / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G31TS-71013HA	1CT:1CT	GO / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G31TS-81013HA	1CT:1CT	GO / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G31TS-91013HA	1CT:1CT	GO / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G31TS-61015HA	1CT:1CT	GO / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G31TS-71015HA	1CT:1CT	GO / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G31TS-81015HA	1CT:1CT	GO / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500
G31TS-91015HA	1CT:1CT	GO / N	-1.0	-1.2	-18	-16	-12	-10	-40	-35	-30	-40	-30	1500

NOTES : 1. LEDs Up / Down G=green, O=orange
2. C.M.R. = Common Mode Rejection



RoHS Compliant

NOTE : Specifications subject to change without notice. Please check our website for latest information.

12.05.2008



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PG. 1

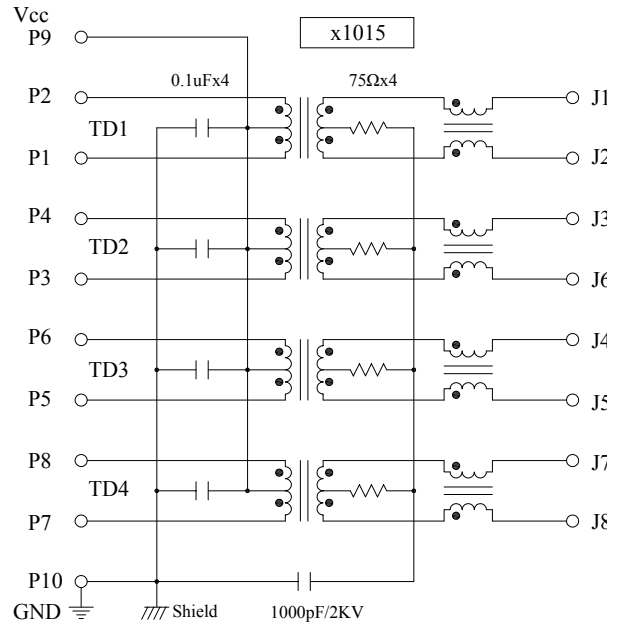
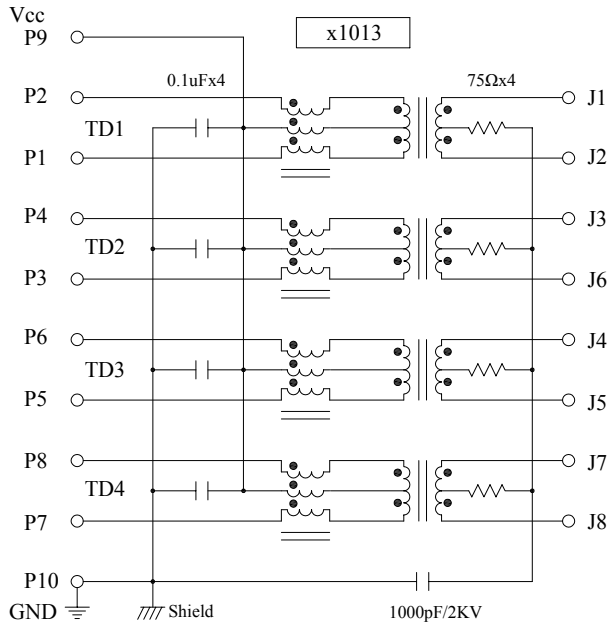
INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

MATERIAL SPECIFICATION

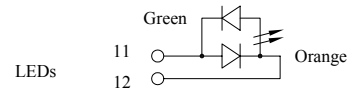
Metal Shell : Copper Alloy, Finish: 50u" Nickel
 Housing / Bottom Cover : Thermoplastic , UL 94V-0, Color Black
 Insert : Thermoplastic , UL 94V-0, Color Black
 Contact Terminal / Phosphor Bronze
 15u" Gold on Contact Area, 100u" Tin on Solder, Both over 50u" Nickel Under-Plated
 Coil Base : Thermoplastic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

SCHEMATIC



LED CONFIGURATION

Standard LED	Wavelength(λ)	V / IF=20mA	
		max.	typ.
Orange	605nm	2.5 V	2.1 V
Green	570nm	2.5 V	2.1 V



RoHS Compliant

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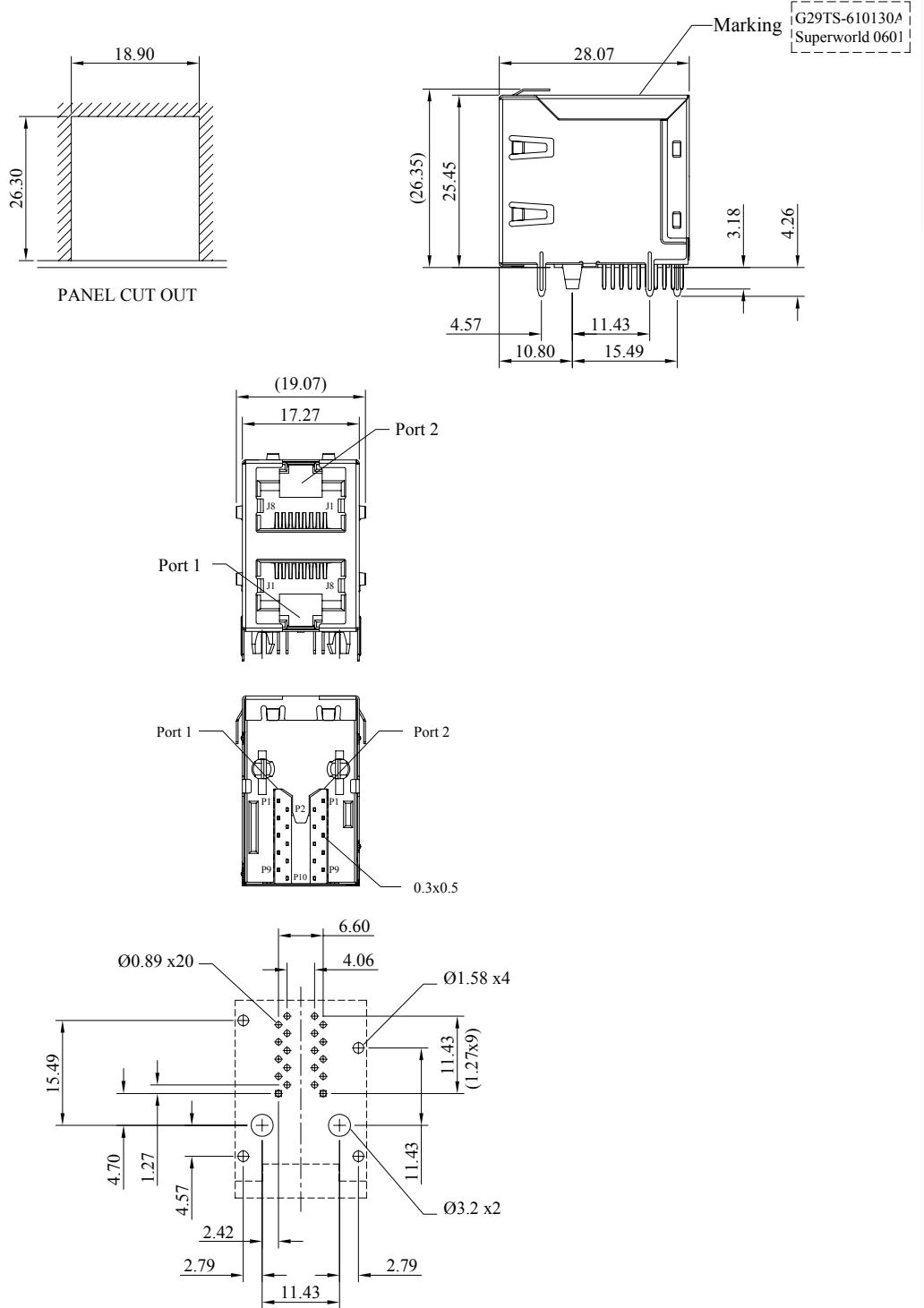


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INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

MECHANICAL : G29TS-610xx0A (2x1)



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



RoHS Compliant

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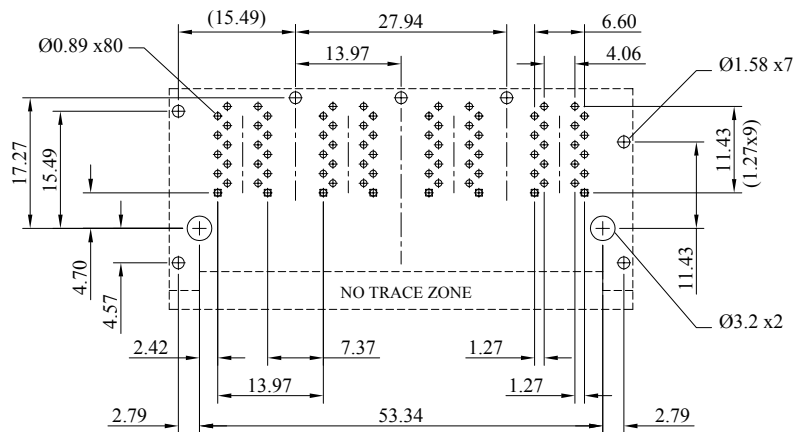
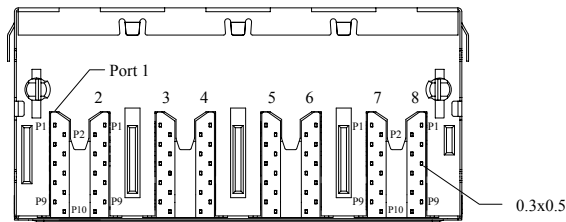
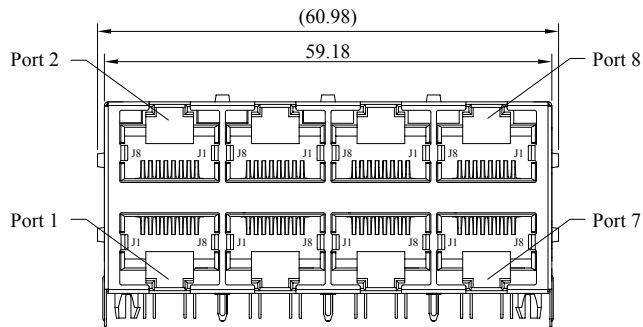
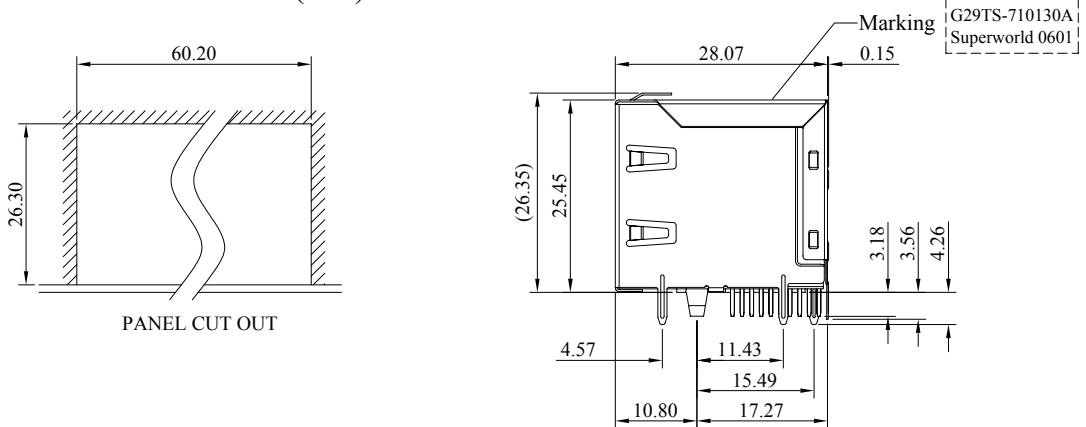


SUPERWORLD ELECTRONICS (S) PTE LTD

INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

MECHANICAL : G29TS-710xx0A (2x4)



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



RoHS Compliant

NOTE : Specifications subject to change without notice. Please check our website for latest information.

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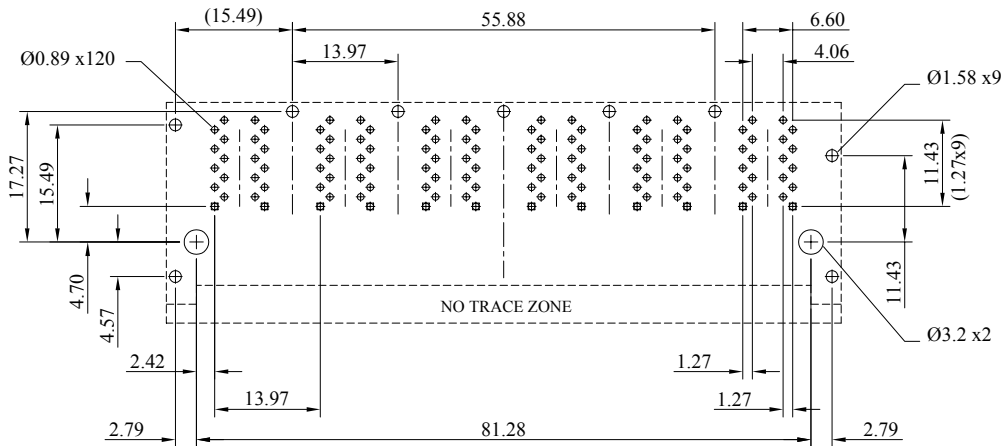
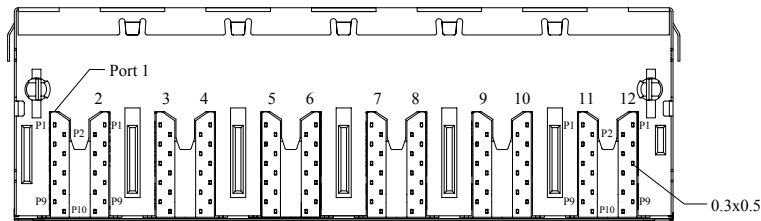
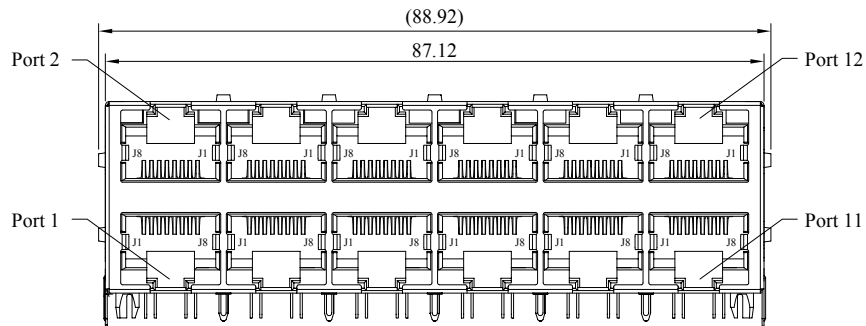
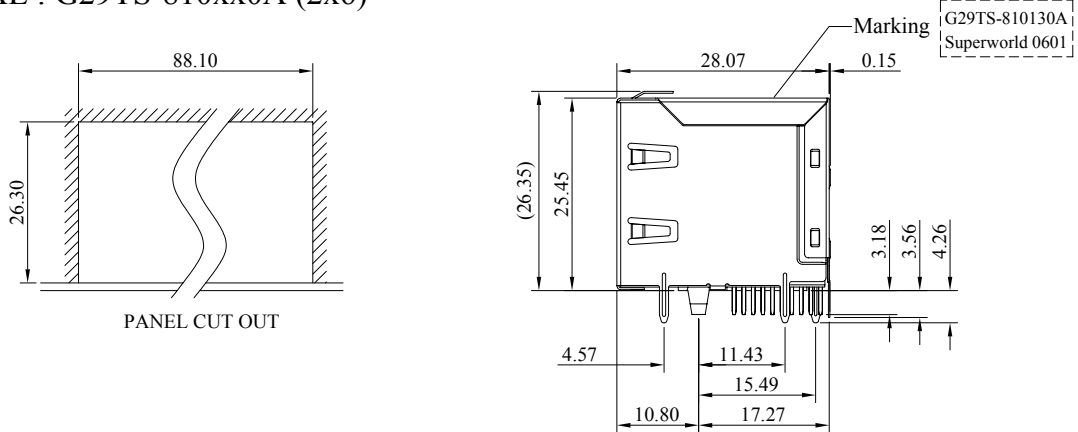


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INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

MECHANICAL : G29TS-810xx0A (2x6)



Suggested PCB Pad Layout
Component Side View

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



RoHS Compliant

NOTE : Specifications subject to change without notice. Please check our website for latest information.

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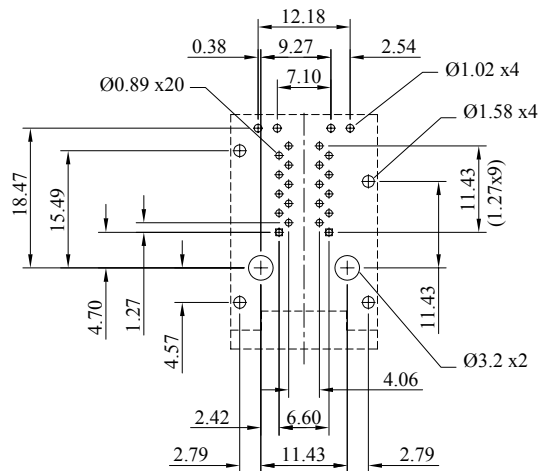
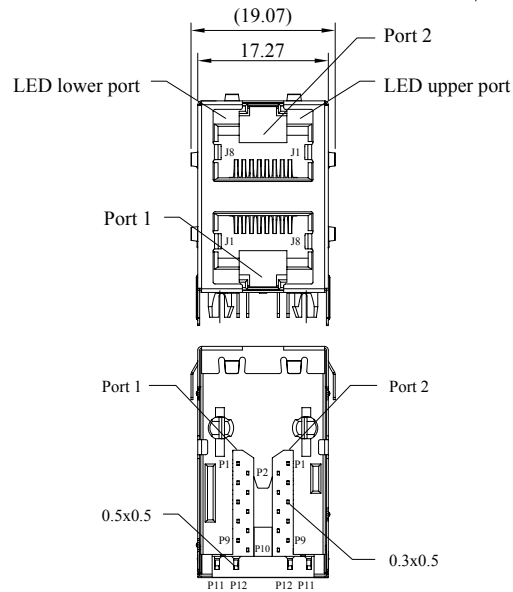
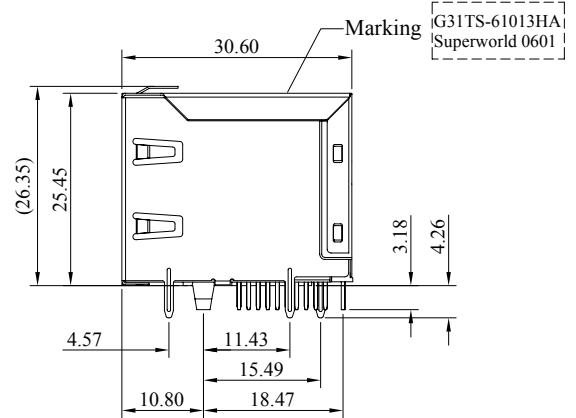
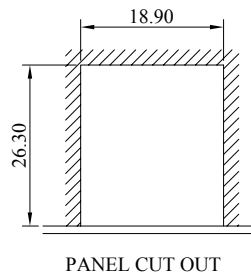


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INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

MECHANICAL : G31TS-610xxHA (2x1)



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



RoHS Compliant

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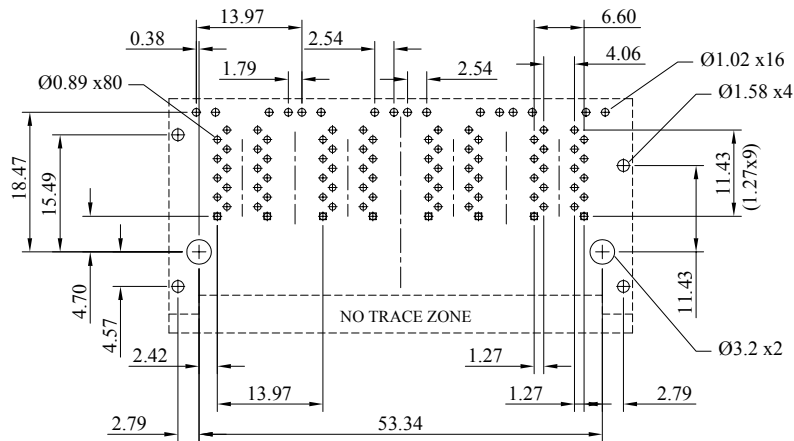
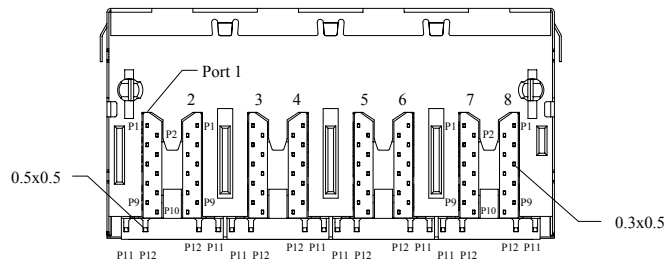
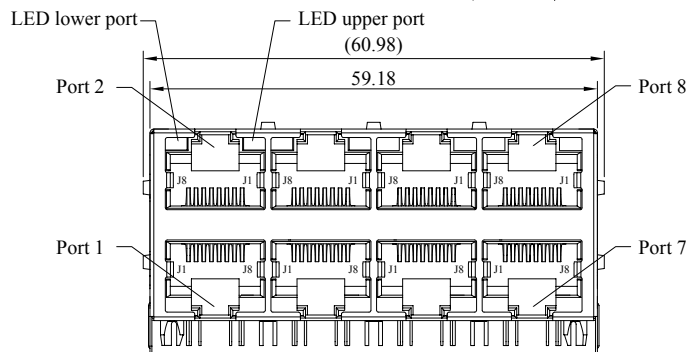
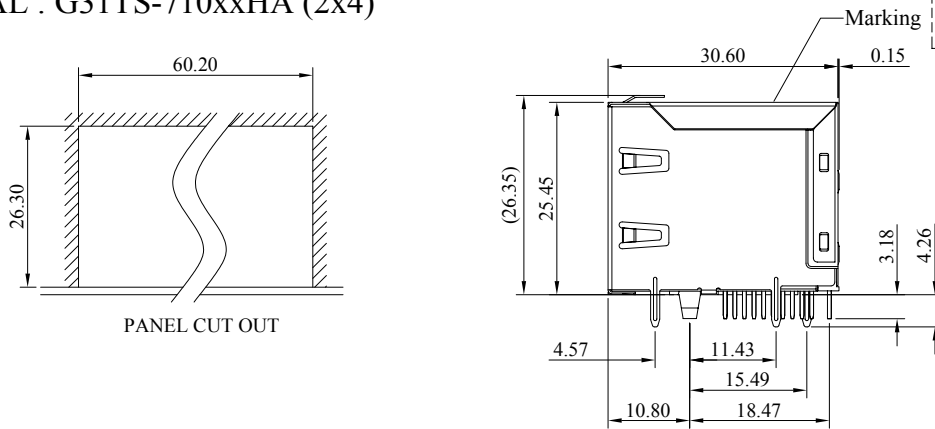
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INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

MECHANICAL : G31TS-710xxHA (2x4)

G31TS-71013HA
Superworld 0601



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



RoHS Compliant

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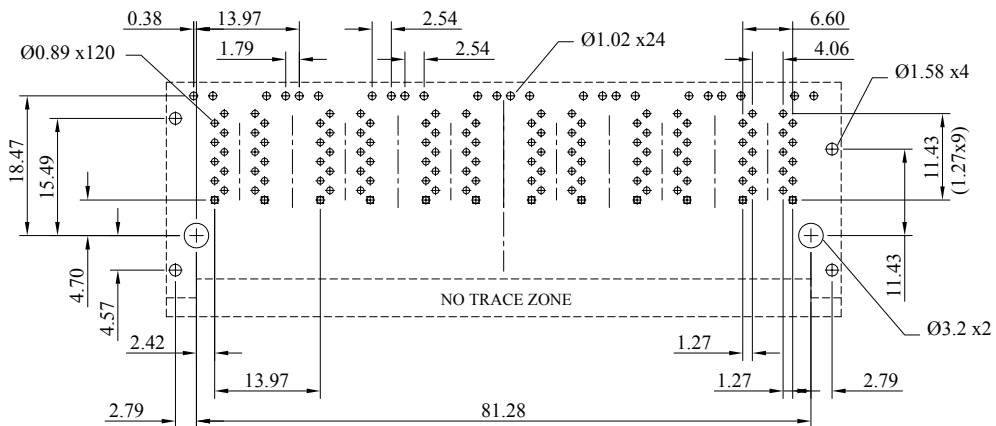
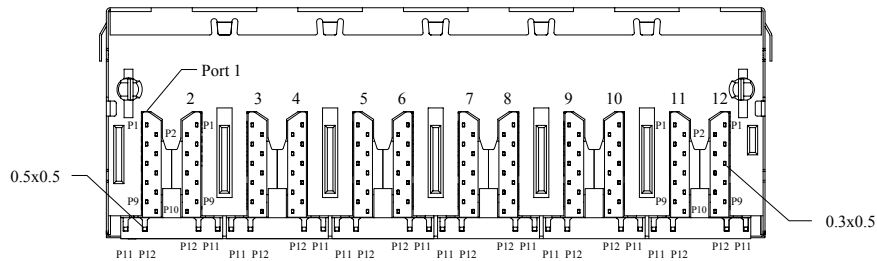
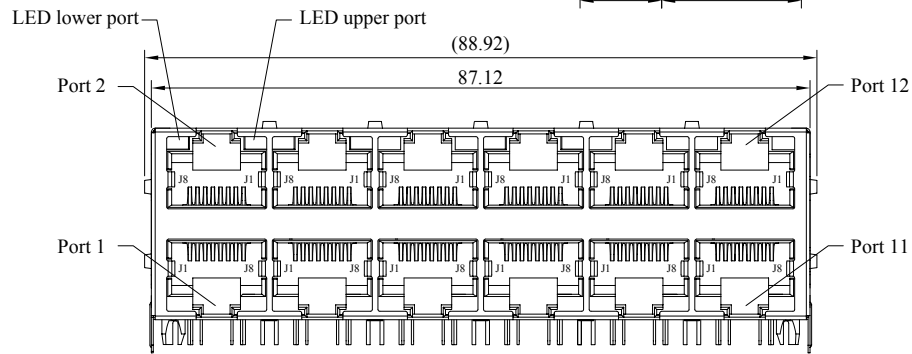
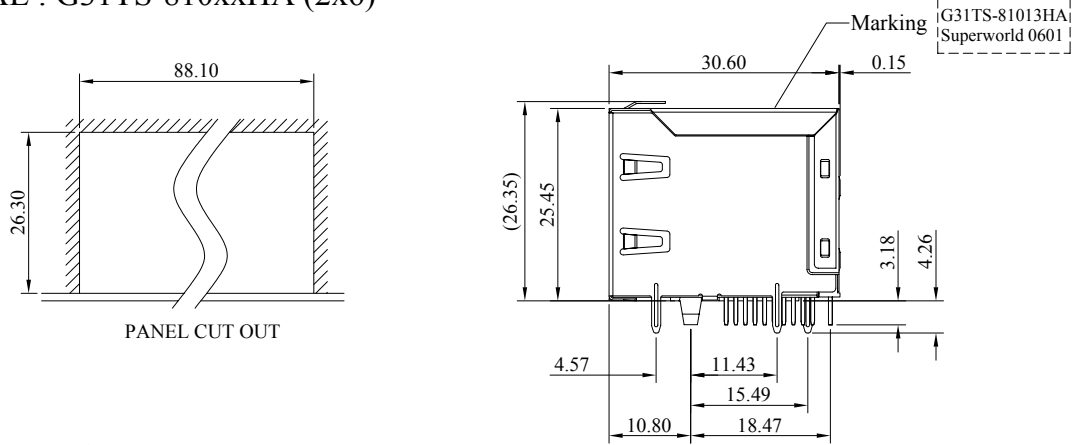
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INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

MECHANICAL : G31TS-810xxHA (2x6)



- 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

Suggested PCB Pad Layout
 Component Side View



RoHS Compliant

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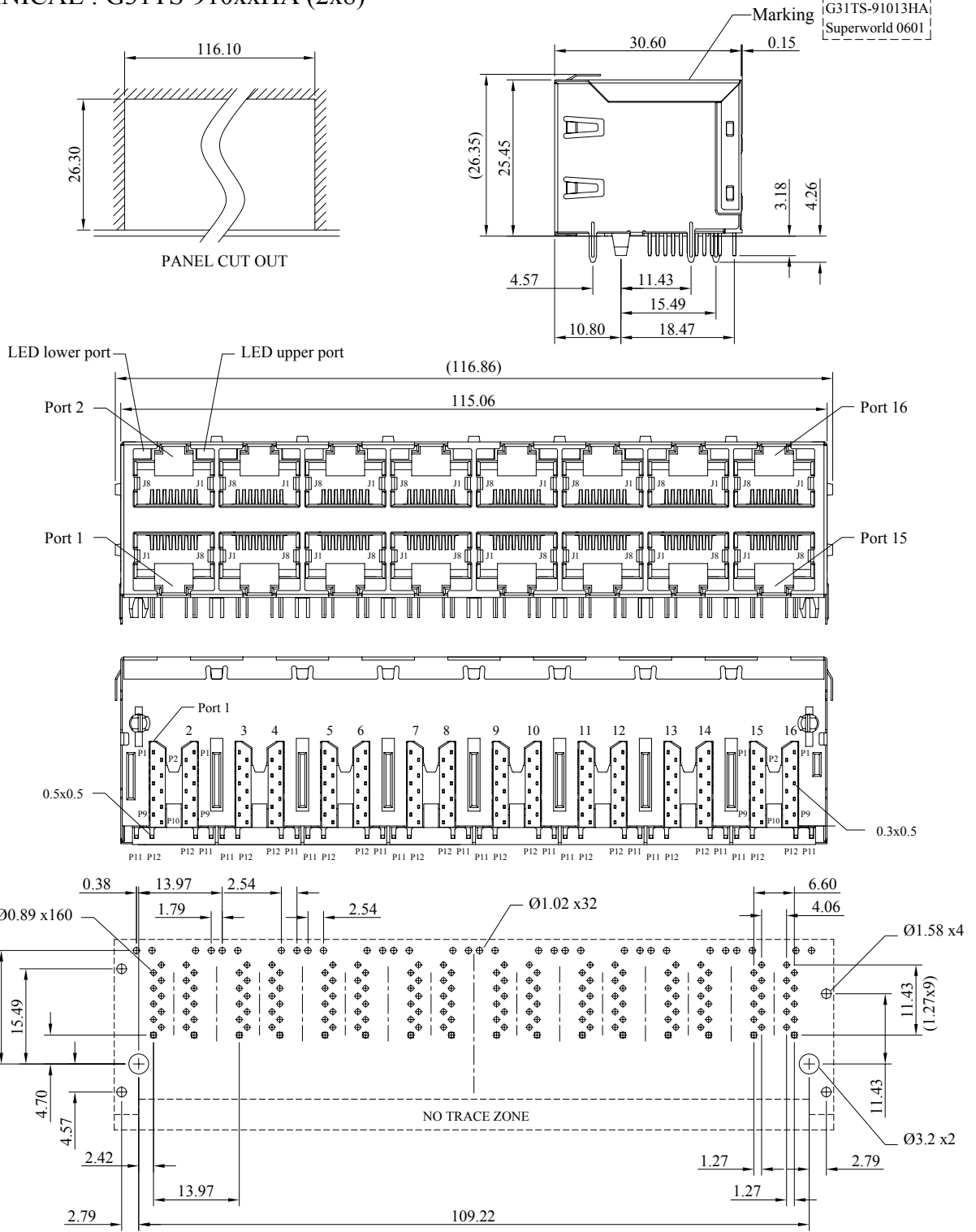
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INTEGRATED MODULAR JACK

10/100/1000 Gigabit Ethernet RJ45 2xN Port

MECHANICAL : G31TS-910xxHA (2x8)

G31TS-91013HA
Superworld 0601



- 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

Suggested PCB Pad Layout
Component Side View



RoHS Compliant

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