Connector Datasheet

PT06J00006Y1

RJ45 1×4 Tab Down W/LED W/O Spring
Left 1X3 Port W/1000 Base-T Transformer
&Right Port W/2.5G Transformer

Prepared: Hyde		Approved: ADAM	
Checked: FEIDI		Customer:	
Version	Changed Reason	Changed by	Date
01	Original version	Hyde	20191030

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Address (India): H-601, Officer City2, Rajnagar Extension, Ghaziabad

Address (TW): 2F., NO 3, Gongye 4th RD., Hukou Shiang Hsinchu County 303-51, Taiwan

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TECHNICAL INFORMATION

1 SCOPE

1.1 Content

1.1.1 This specification covers performance, tests and quality requirements for RJ45 1×4 Tab Down W/LED W/O Spring Left 1X3 Port W/1000 Base-T Transformer &Right Port W/2.5G Transformer.

2 APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, latest edition of the specification applies. In the event of conflict between requirements of this specification and product drawing, product drawing shall take precedence.

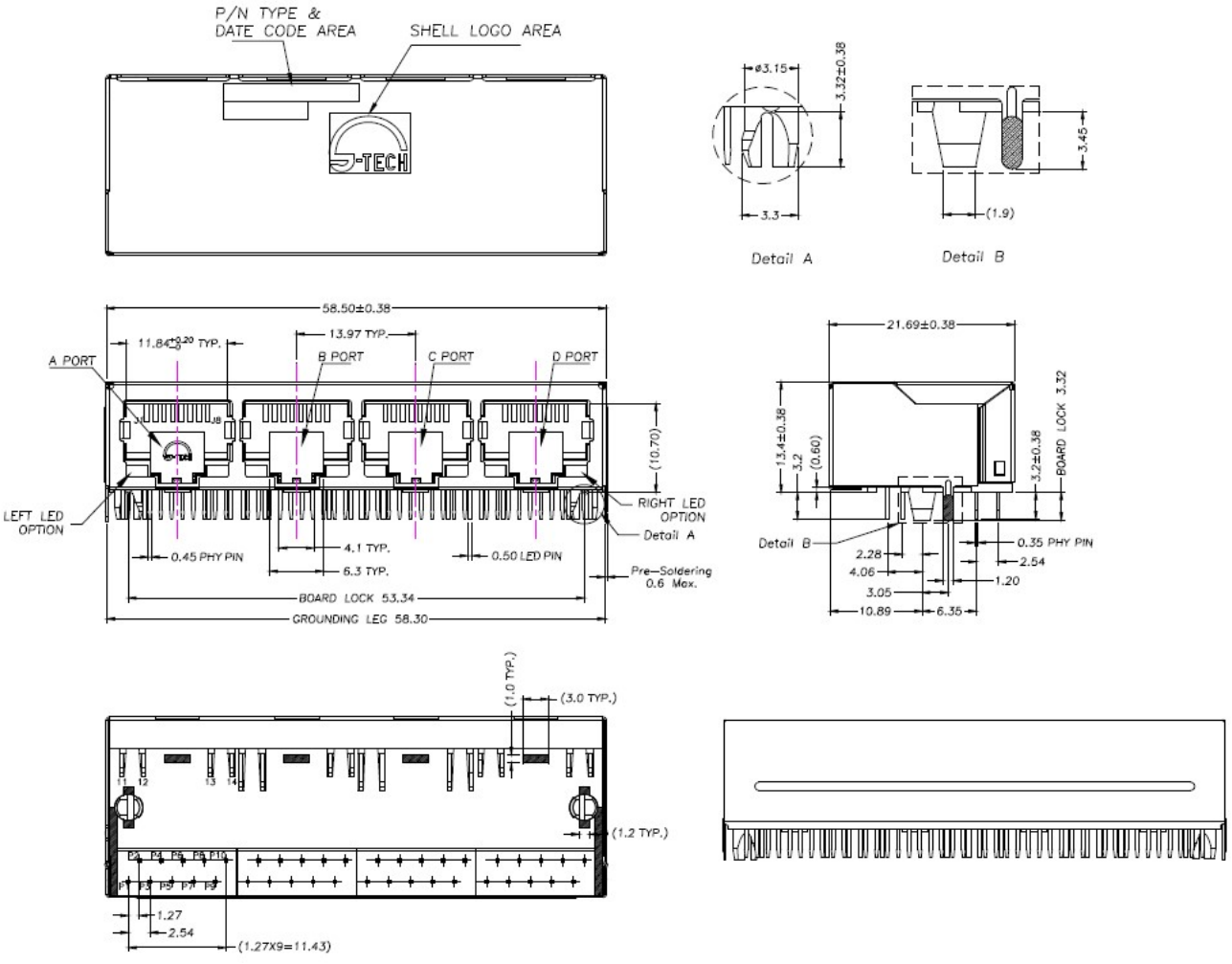
2.1 Commercial standards, specifications and report

2.1.1 MIL-STD-1344A

2.1.2 EIA-364

3 MECHANIC DIMENSIONS

Component Configuration and Dimensions



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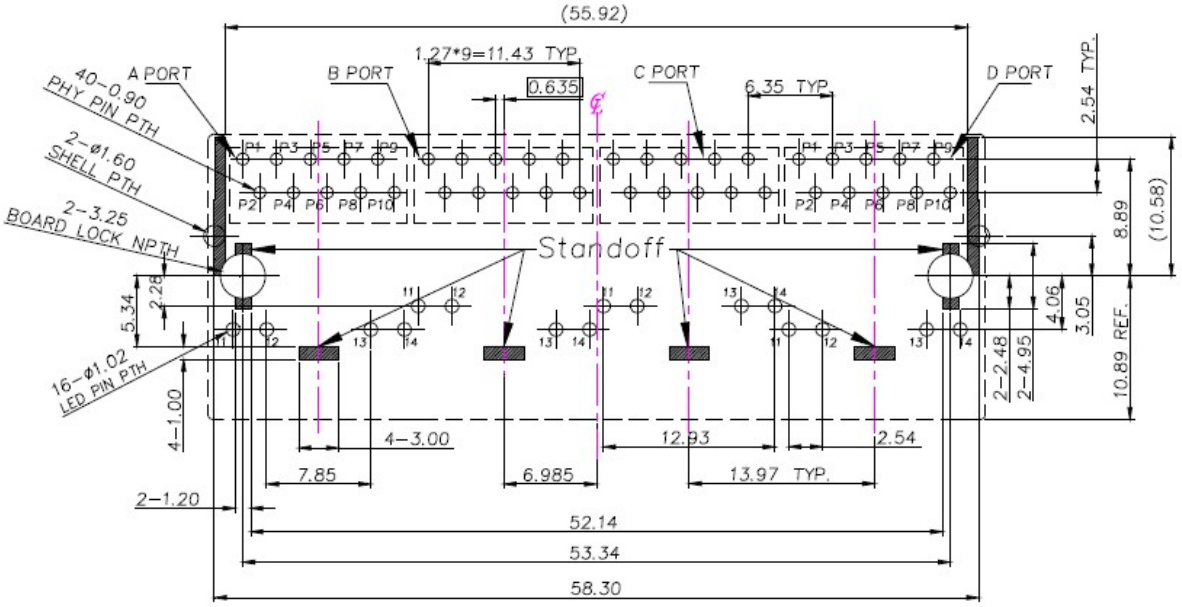
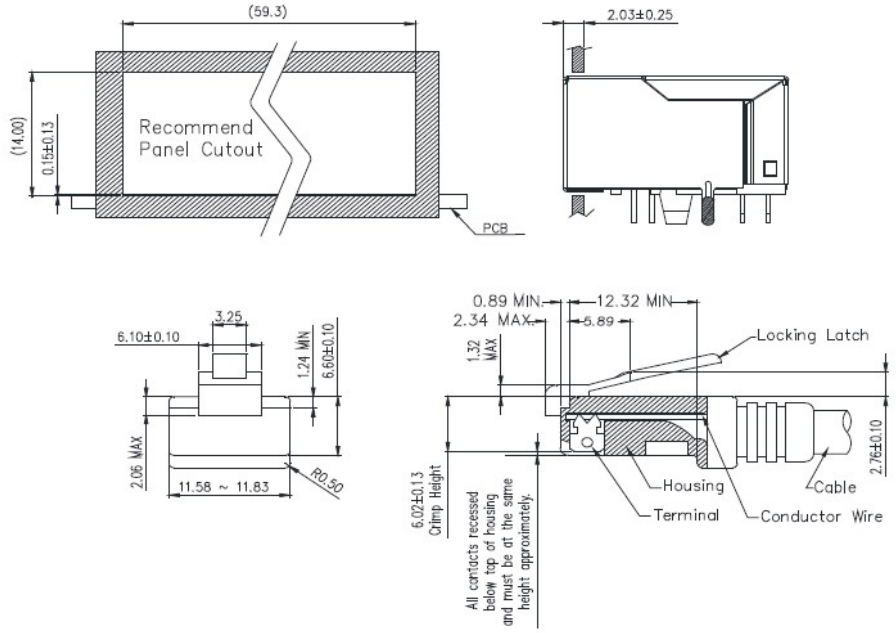
Pins assignment for PCB Layout



RECOMMENDED PCB LAYOUT
COMPONENT SIDE
ALL DIMENSION TOLERANCE ARE ±0.05mm
UNLESS OTHERWISE SPECIFIED

Recommend Panel Cutout and Plug Dim



All dimensions follow :
FCC subpart F, 68,500, Figure (C)(2)(i)
IEC 60603-7

STANDARD MODULAR PLUG ASSEMBLY

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4 REQUIREMENTS

4.1 Design and Construction

4.1.1 Product shall be of design, construction and physical dimensions specified on applicable product drawing.

4.2 Materials and Finish

4.2.1 Contact:

4.2.1.1 RJ Contact : Phosphor Bronze

Finish : (a) Contact Area : Gold Flash

(b) Solder tail Area : 100 μ" Matted Tin

(c) Underplating : 50 μ" Nickel over all

4.2.1.2 Joint Contact : Phosphor Bronze

Finish : 100 μ" Matted Tin & 50 μ" Nickel over all

4.2.2 Plastic Part:

4.2.2.1 Housing: High temperature engineering Plastic, PA46, Yellow

Flame Class: UL94 V-0

4.2.2.2 Module: High temperature engineering Plastic, PF(Phenolic resin), Black

Flame Class: UL94 V-0

4.2.3 Shell

4.2.3.1 Shell: Stainless steel

4.2.3.2 Shell of Grounding Pin: Pre-soldering Sn

4.3 LED Lamp

Emitting color	λp(nm)	Vf@If= 20mA	Ir@Vr=5V
Green	565	1.7-2.6	10 uA max
Yellow	585	1.7-2.6	10 uA max

4.4 Operating and Storage Temperature

4.4.1 Operating Temperature : 0℃TO +70℃

4.4.2 Storage Temperature : -40℃TO +85℃

4.5 Mechanical Characteristics

4.5.1 Mating force: 20N MAX

4.5.2 Unmating force: 20N MAX;

4.5.3 Durability: 1000 cycles

4.6 Reliability Test:

4.6.1 Resistance to soldering heat - High Temperature Resistance:

265+5/-0℃， 3-5 seconds for 2 times.

4.6.2 Rework temperature: 350℃Max. 3~5seconds for 3 times.

4.7 Environmental Test:

4.7.1 Moisture Resistance : MSL level-3

4.7.2 Saving life: 1 year

4.7.3 Thermal shock cycle Test: Expose Sample connectors under the temperature changes between -40℃and 85℃ for 25 cycles holding for 30minutes at the both extremes, in accordance with test method of SPEC.

4.7.4 Temperature life: Subject Sample connectors to temperature life at 85℃ for 168 hours. EIA-364-22B, Class shell be satisfied.

4.7.5 Humidity test: Subject Sample connector, to relative humidity 85%RH and a temperature of 85℃ for 168 hours. It shall be subjected to standard atmospheric.

Class shell be satisfied. MIL-STD-1344A.method:1002.2.

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4.8 Performance and Test Description

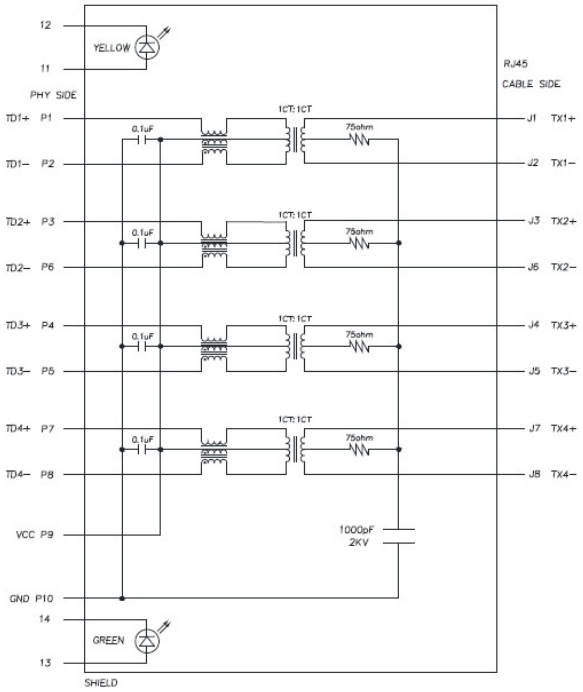
Product is designed to meet electrical, mechanical and environmental performance requirements. All tests are performed at ambient environmental conditions per
MIL-STD-1344A and EIA-364 unless otherwise specified.

4.9 Packaging and Packing

All parts shall be packaged and packed to protect against physical damage, corrosion and deterioration during shipment and storage.

5 ELECTRICAL CHARACTERISTICS

5.1 Schematic(ABC port)



5.2 Insertion loss :

1-100 MHz – 1.0dB MAX.
100~125 MHz – 1.2dB MAX.
Return loss : 1-30 MHz – 18dB MIN. load 100 OHM
30-60 MHz – 16dB MIN. load 100 OHM
60-80 MHz – 12dB MIN. load 100 OHM
80-100 MHz – 10dB MIN. load 100 OHM

5.3 Common Mode Rejection

@ 1~100 MHz – 30dB MIN.

5.4 Cross Talk

@ 1~100 MHz – 30dB MIN

5.5 Primary Inductance

@ 100KHz, 0.1V, 8mA DC BIAS
P(1-2), P(3-6), P(4-5), P(7-8): 350uH MIN

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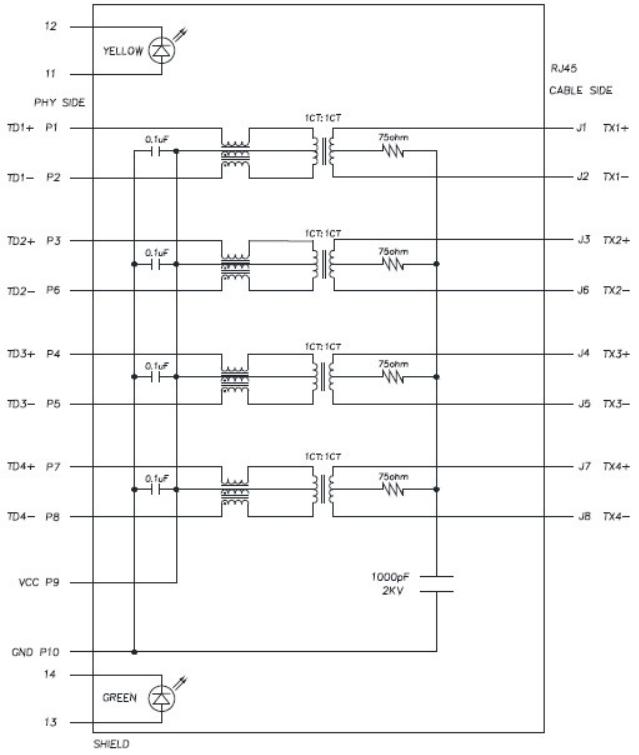
5.6 Hi-Pot TEST

PRIMARY TO SECONDARY: 2250 VDC.

6 ELECTRICAL CHARACTERISTICS

6.1 Schematic(D port)



6.2 Electrical Specifications

PARAMETER	SPECIFICATION
TURNS RATIO 1.00±3%	TURNS RATIO 1.00±3%
TX & RX Insertion Loss(SDD21&SDD12) 1~50 MHz : -0.5dB Max	TX & RX Insertion Loss(SDD21&SDD12) 1~50 MHz : -0.5dB Max
50~125 MHz : -1.0 dB Max	50~125 MHz : -1.0 dB Max
TX & RX Return Loss(SDD11&SDD22) 1~40 MHz : -20dB Min	TX & RX Return Loss(SDD11&SDD22) 1~40 MHz : -20dB Min
40~200 MHz : -20+15*log(f/40)dB Min	40~200 MHz : -20+15*log(f/40)dB Min
CROSSTALK(SDD21) 1~125 MHz : -30 dB Min	CROSSTALK(SDD21) 1~125 MHz : -30 dB Min
RX Common to Diff(SDC12) 1~125 MHz : -40+f/35 dB Min	RX Common to Diff(SDC12) 1~125 MHz : -40+f/35 dB Min
Common mode attenuation(SCC21) 30~200 MHz : -30 dB Min	Common mode attenuation(SCC21) 30~200 MHz : -30 dB Min

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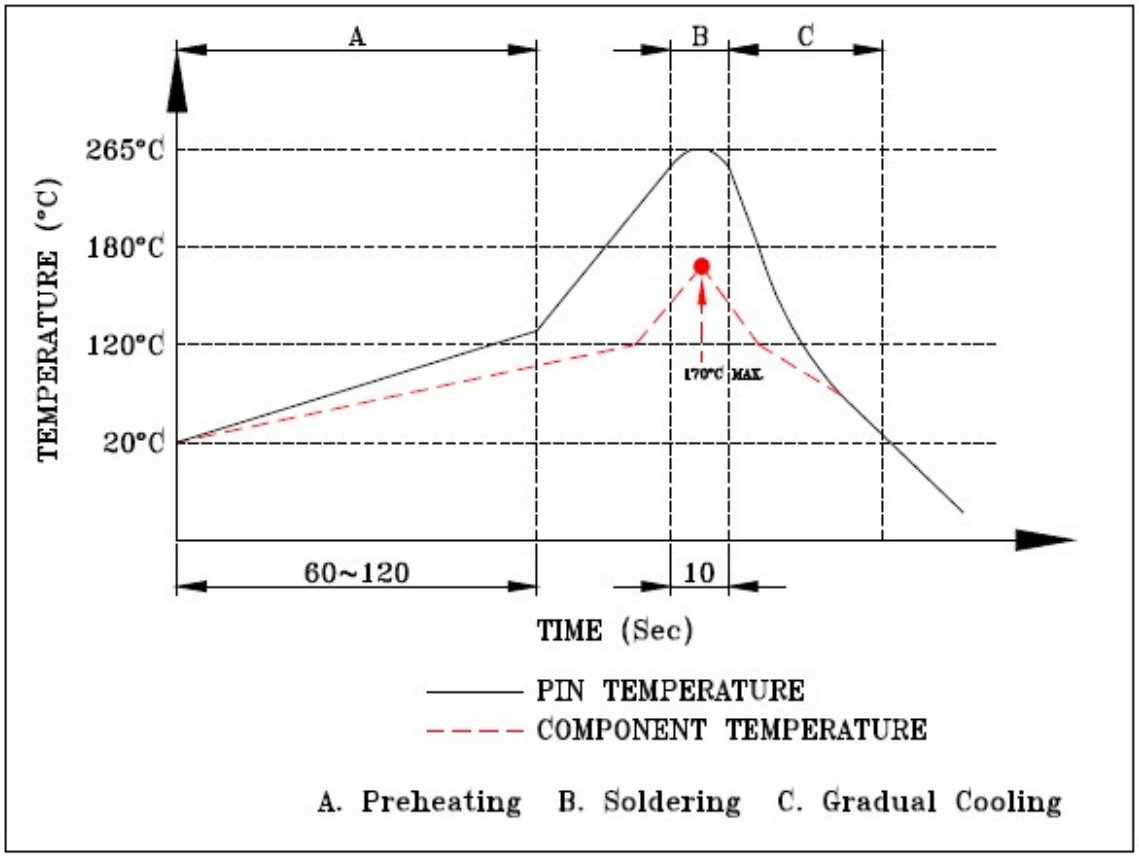
Resistance to flow solder heat



SUGGESTED WAVE SOLDER CURVE

(1)Tip temperature : 265+5/−0°C

(2)Tip temperature time : 3~5sec

Note: The product specification only for standard product

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