

SPECIFICATION

SPEC. NO. : _____ REV : XB

DATE : 04-22-2003

PRODUCT NAME : RJ-45 1 Row X 1 Port With Transformer
Module

PRODUCT NO : P02-B02-P7C9 (LEAD FREE)

宣 得 股 份 有 限 公 司

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	APPROVED	CHECKED	PREPARED
NAME			

Product Number : P02-B02-P7C9 (LEAD FREE)

Product Description : RJ-45 1 Row X 1 Port With Transformer Module

1 SCOPE

1.1 Content

1.1.1 This specification covers performance, tests and quality requirements for RJ-45 1 Row X 1 Port With Transformer Module.

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.

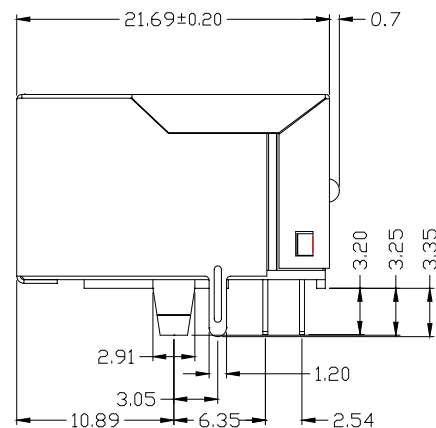
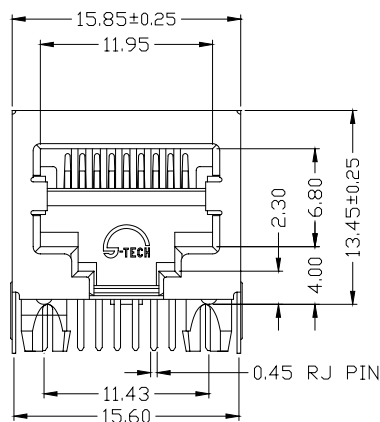
2.1 Commercial standards, specifications and report

2.1.1 MIL-STD-1344A

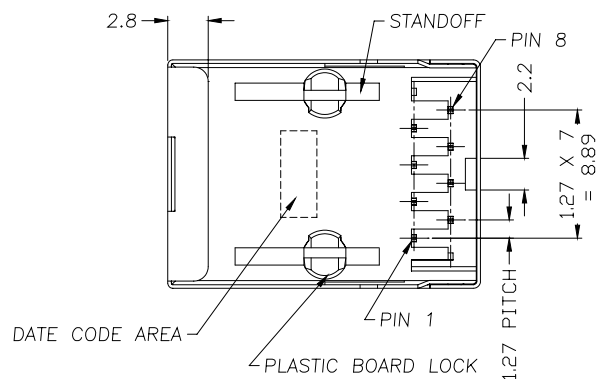
2.1.2 MIL-STD-202F

3 MECHANIC DIMENSIONS

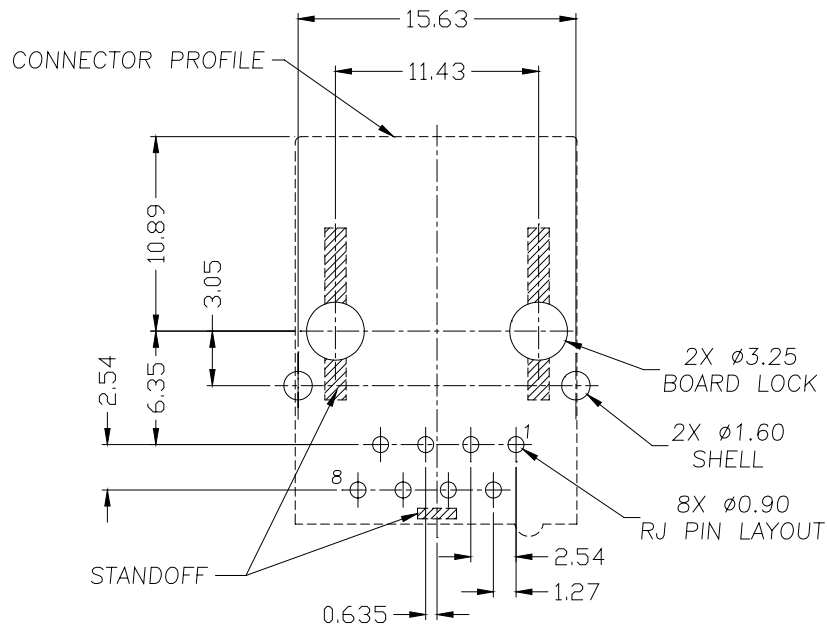
3.1 Dimensions



UNIT:mm
.X ±0.38
.XX ±0.25
.XXX ±0.13



3.2 PCB Layout



RECOMMENDED PCB LAYOUT
COMPONENT SIDE
ALL DIMENSION TOLERANCE ARE $\pm 0.05\text{mm}$
UNLESS OTHERWISE SPECIFIED

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 Upper Contact : Phosphor Bronze , Thickness=0.35mm

Finish : (a) Contact Area : $30\mu\text{m}$ min. Gold

(b) Solder tail Area : Nickel

(c) Underplating : $50\mu\text{m}$ min. Nickel over all

4.2.1.2 RJ Lower Contact : Phosphor Bronze , Thickness=0.35mm

Finish : Gold Flash.Nickel

4.2.2 Plastic Part :

4.2.2.1 RJ Housing : Thermoplastic , NYLON 6T , Black

UL FILE No. : E52579(M)

Manufacturer : MITSUI Petrochemical Industries

Grade : CH230N

Flame Class : UL 94V-0

4.2.2.2 Insert : Thermoplastic , NYLON 6T , Black

UL FILE No. : E52579(M)

Manufacturer : MITSUI Petrochemical Industries

Grade : CH230N

Flame Class : UL 94V-0

4.2.3 Shell :

4.2.3.1 Front Shell : Stainless, SUS 304 , Thickness=0.25mm

4.2.3.2 Back Shell : Stainless, SUS 304 , Thickness=0.20mm

4.2.3.3 4.2.3.3 Shell of grounding pin : pre-soldering : Sn / Ag / Cu (96.5 / 3 / 0.5)

4.2.4 Transformer :

4.2.4.1 Material : FR4 , Thickness=1.0mm

4.2.4.2 Two Layer PCB

4.3 Operating and Storage Temperature

4.3.1 Operating Temperature : 0°C TO +70°C

4.3.2 Non-Operating Temperature : -40°C TO +85°C

4.4 Ratings

4.4.1 Voltage rating : 125 VAC

4.4.2 Current rating : 1.5 A

4.5 Performance and Test Description

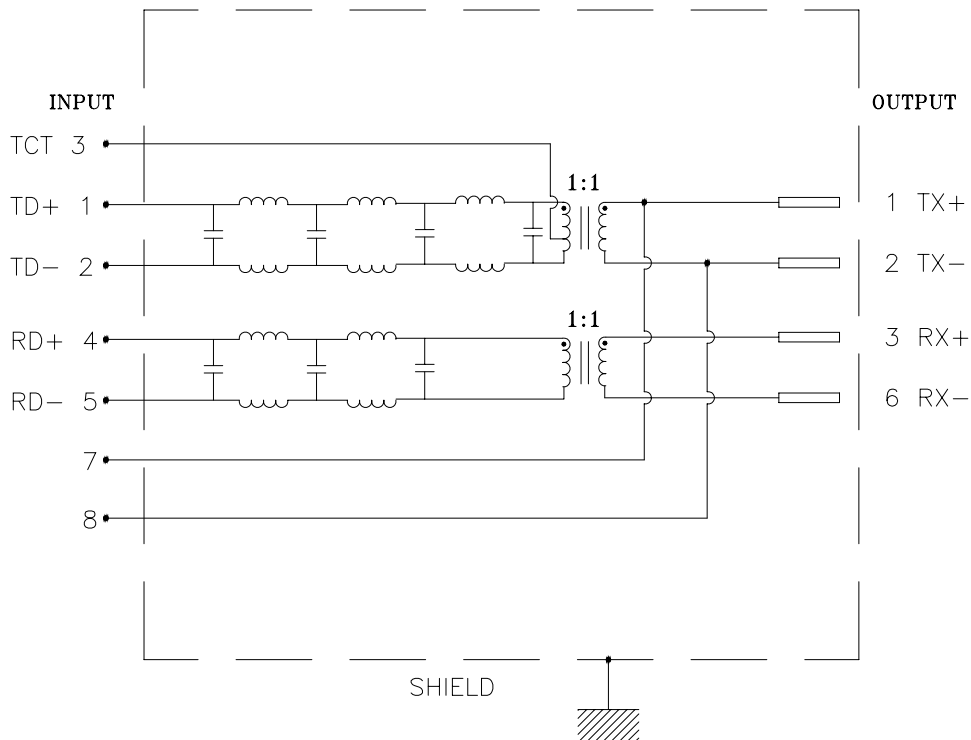
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A unless otherwise specified.

4.6 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



5.2 Transmitter filter

Type : Balance low pass 100 OHM impedance

Cut off frequency : 17 ± 1.5 MHz -3.0 dB TYP

Insertion loss : 1-10 MHz -1.0 dB MAX.

Attenuation : @ 30 MHz -32 dB MIN.

@ 50 MHz -35 dB MIN.

Return loss : 1-10 MHz -18 dB MIN. load 100 OHM

5.3 Receiver filter

Type : Balance low pass 100 OHM impedance

Cut off frequency : 17 ± 1.5 MHz -3.0 dB TYP

Insertion loss : 1-10 MHz -1.0 dB MAX.

Attenuation : @ 30 MHz -20 dB MIN.

@ 50 MHz -25 dB MIN.

Return loss : 1-10 MHz -18 dB MIN. load 100 OHM

5.4 Common Mode Rejection

@ 1-50 MHz -30 dB MIN.

@ 50-100 MHz -25 dB MIN.

5.5 Cross Talk

@ 1-10 MHz -35 dB MIN.

5.6 HiPot TEST

Input(1-2) to Output(1-2) : 1000VAC, 60sec

Input(4-5) to Output(3-6) : 1000VAC, 60sec

6 ORDER INFORMATION :

PXX - B XX - X XX X
A B C D E

A : Number Ports

02. RJ-45 1 Row X 1 Port With Transformer Module

B : Shield Type

02. B Type

C : Solder

P. Through Hole & Lead Free

D : Type of Circuit

7C. 7C Type Circuit

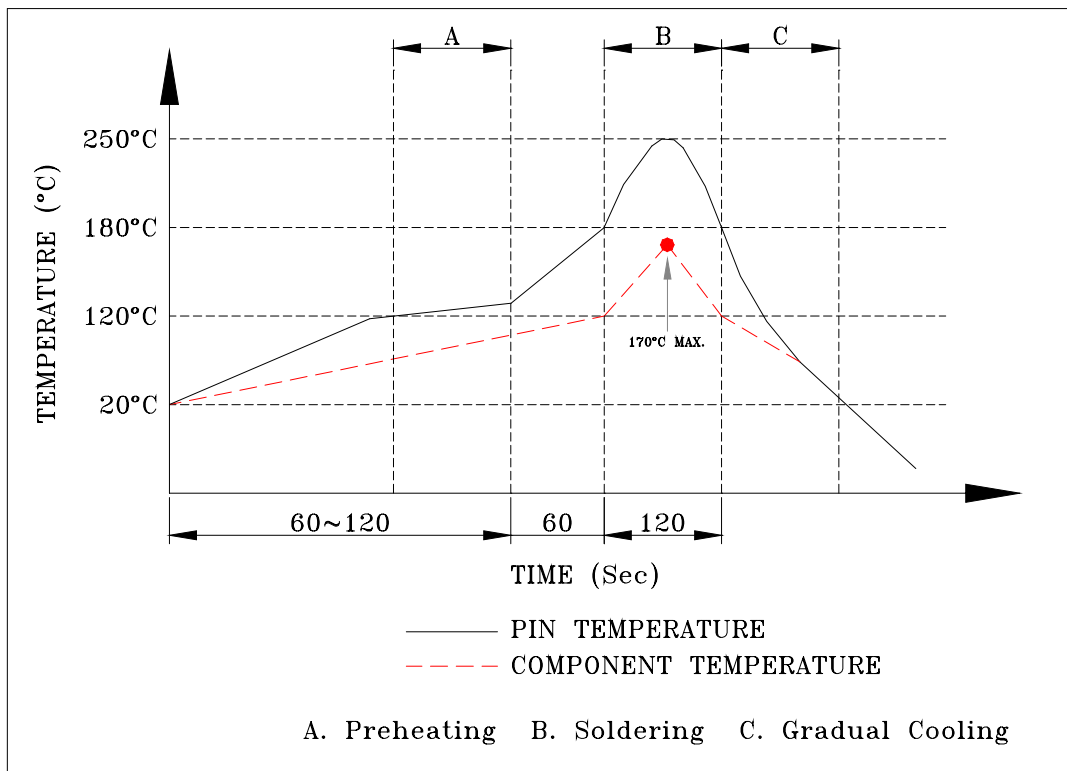
E : Contact Plating

Selected Gold Plating

9. 30u" minimum Gold on Contact Area

7. Profile of Wave Solder

7.1 PROFILE OF WAVE SOLDER



SUGGESTED WAVE SOLDER CURVE

(1) Tip temperature : $250 \pm 10^\circ\text{C}$

(2) Tip temperature time : 5sec max

* The melting point of Sn96.5/Ag3/Cu0.5: 217°C