

SPECIFICATION

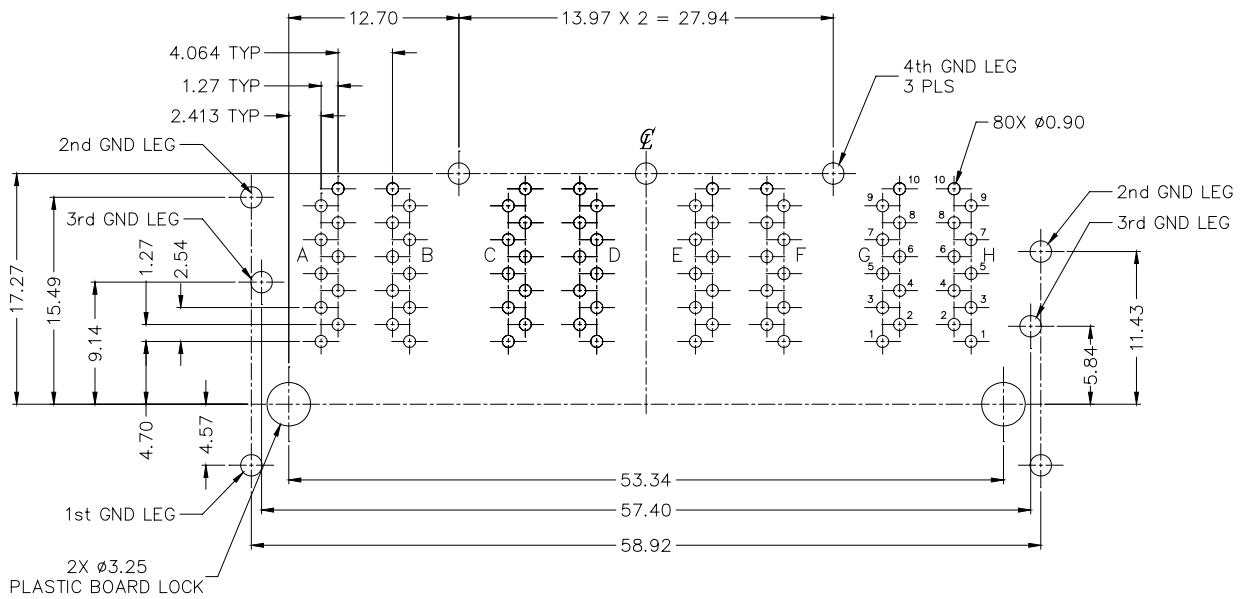
SPEC. NO. : _____ REV : XC

DATE : _____

PRODUCT NAME : RJ45 2x4 B TYPE WITH GIGABIT
TRANSFORMER

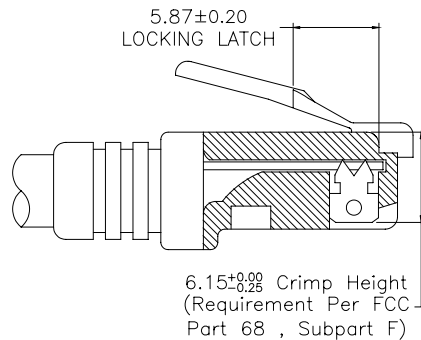
PRODUCT NO : KW-P59162

3.2 PCB Layout



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

4 RECOMMENED PLUG DIMENSION



5 REQUIREMENTS

5.1 Design and Construction

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

5.2 Materials and Finish

5.2.1 Contact :

5.2.1.1 RJ Contact : Phosphor Bronze , Thickness=0.30mm

Finish : (a) Contact Area : 30μ ” min. Gold

(b) Solder tail Area : 100μ ” min. Tin/Lead (9:1)

(c) Underplating : 30 ~ 80μ ” min. Nickel over all

5.2.1.2 Joint Contact : Brass , Thickness=0.30mm

Finish : 100μ ” min. Tin/Lead (9:1) over 50μ ” min. Nickel

5.2.2 Plastic Part :

5.2.2.1 Housing : Thermoplastic , PA6T , Black , UL94 V-0

Manufacturer : Mitsui Chemicals Inc, UL FILE No. : E52579

5.2.2.2 Insert : Thermoplastic , PBT , Black , UL94 V-0

Manufacturer : Mitsui Chemicals Inc, UL FILE No. : E130155

5.2.2.3 Spacer : Thermoplastic , PA6T , Black , UL94 V-0

Manufacturer : Mitsui Chemicals Inc, UL FILE No. : E52579

5.2.2.4 BOX : Thermoplastic , PBT , Black , UL94 V-0

Manufacturer : Nan Ya Plastics Corp., UL FILE No. : E130155

5.2.3 Shell

5.2.3.1 Front Shell : Brass , C2680R-H , Thickness=0.20mm

Plating : 20~50 μ ” Nickel plating

5.2.3.2 Back Shell : Stainless , SUS 304-1/2H , Thickness=0.20mm

5.2.3.3 Grounding Shell : Brass , C2680R-H , Thickness=0.20mm

Plating : 100 μ ” min. Tin/Lead (9:1) over 50 μ ” min. Nicke

5.2.4 Transformer

5.2.4.1 Material : FR4, Thickness=0.50mm

5.2.4.2 Two Layer PCB

5.3 Operating and Storage Temperature

5.3.1 Operating Temperature : 0 TO +70

5.3.2 Non-Operating Temperature : -40 TO +85

5.4 Ratings

5.4.1 Voltage rating : 125 VAC

5.4.2 Current rating : 1.5 A

5.5 Performance and Test Description

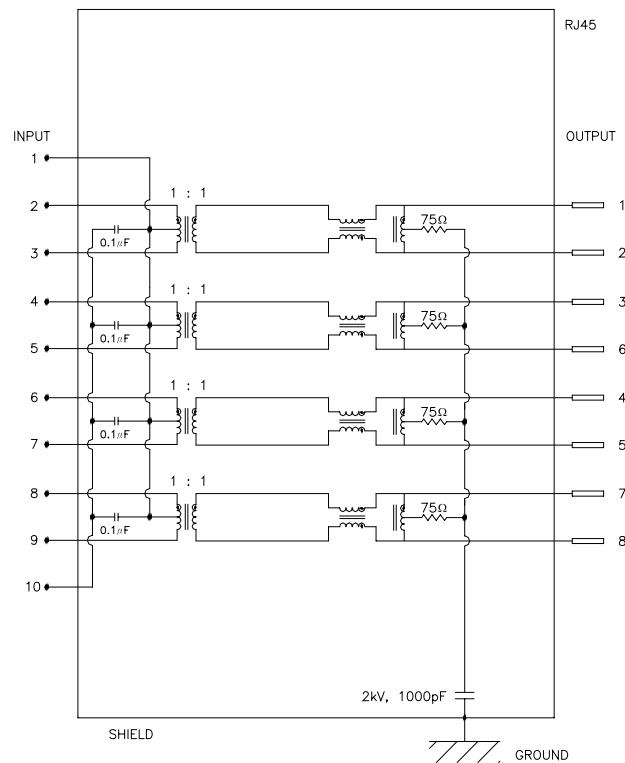
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

5.6 Packaging and Packing

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

6 ELECTRICAL CHARACTERISTICS

6.1 Schematic



6.1 Transmitter filter & Receiver filter

Type : Balance low pass 100 impedance

Insertion loss : 1~100 MHz -1.0dB MAX.

Return loss : 1~30 MHz -18dB MIN. load 100

30~60 MHz -16dB MIN. load 100

60~80 MHz -12dB MIN. load 100

80~100 MHz -10dB MIN. load 100

6.2 Common Mode Rejection

@ 1~100 MHz -30dB MIN.

6.3 Cross Talk

@ 1~100 MHz -25dB MIN.

6.4 Inductance @ 100KHz, 0.1V, 8mA DC BIAS

Input(2-3), Input(4-5) : 350µH MIN.

Input(6-7), Input(8-9) : 350µH MIN.

6.5 HiPot TEST

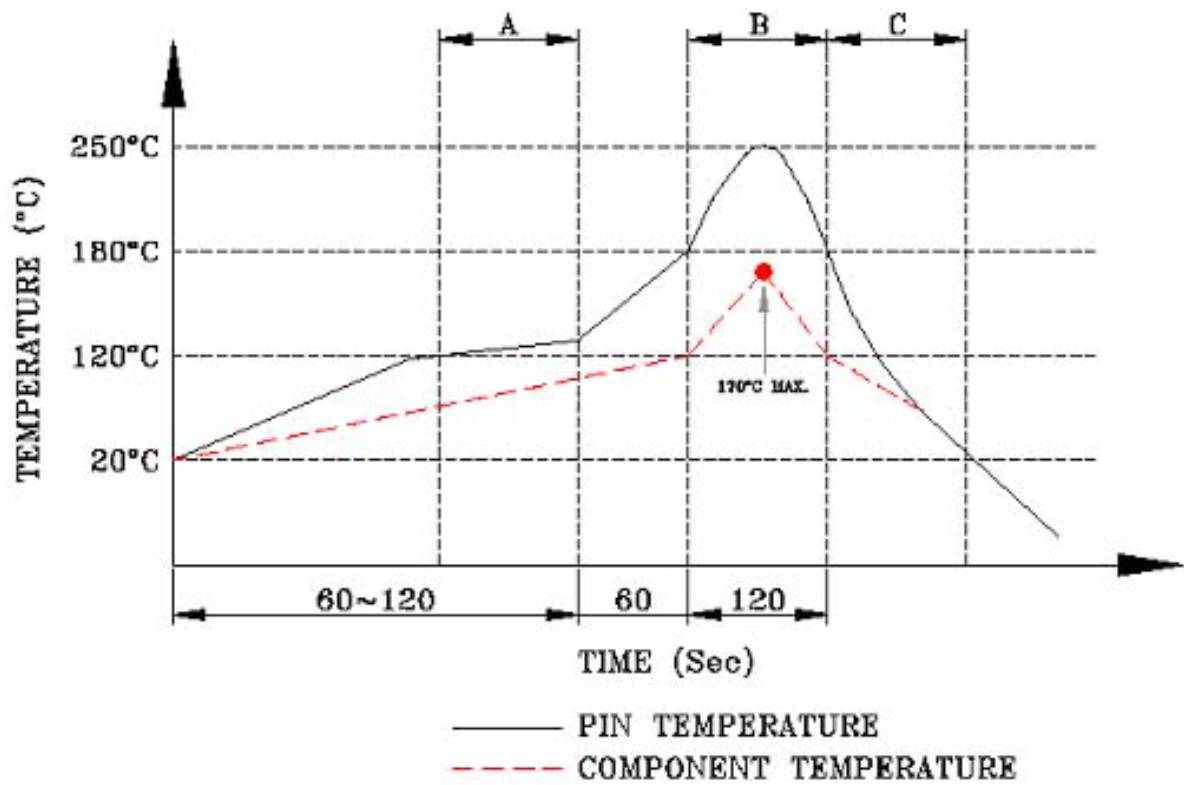
Input(2-3) to Output(1-2) : 1500VAC, 60sec

Input(4-5) to Output(3-6) : 1500VAC, 60sec

Input(6-7) to Output(4-5) : 1500VAC, 60sec

Input(8-9) to Output(7-8) : 1500VAC, 60sec

7. PROFILE OF WAVE SOLDERI



A. Preheating B. Soldering C. Gradual Cooling

SUGGESTED WAVE SOLDER

- (1) Tip Temperature : 250 ± 10
 - (2) Tip Temperature Time : 5 sec Max.
- * The melting point of Tin : 183