

# SPECIFICATION

SPEC. NO. :           DG1409009                REV :           A          

DATE :           11-Aug-2015          

PRODUCT NAME :           RJ45 + USB Stack 2.0 W/LED            
          W/10/100 Base Magnetic Module Transformer          

PRODUCT NO :           RUA1JA-4JAC-DC0-0R (RoHS Compliant)          


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QR-FR-005A

# SPECIFICATION

Product Number: RUA1JA-4JAC-DC0-0R (RoHS Compliant)

Product Description: RJ45 + USB Stack 2.0 W/LED&W/10/100 Base Magnetic Module Transformer

## 1 SCOPE

### 1.1 Content

1.1.1 This specification covers performance, tests and quality requirements for RJ45 + USB Stack 2.0 W/LED & W/10/100 Base Magnetic Module 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.

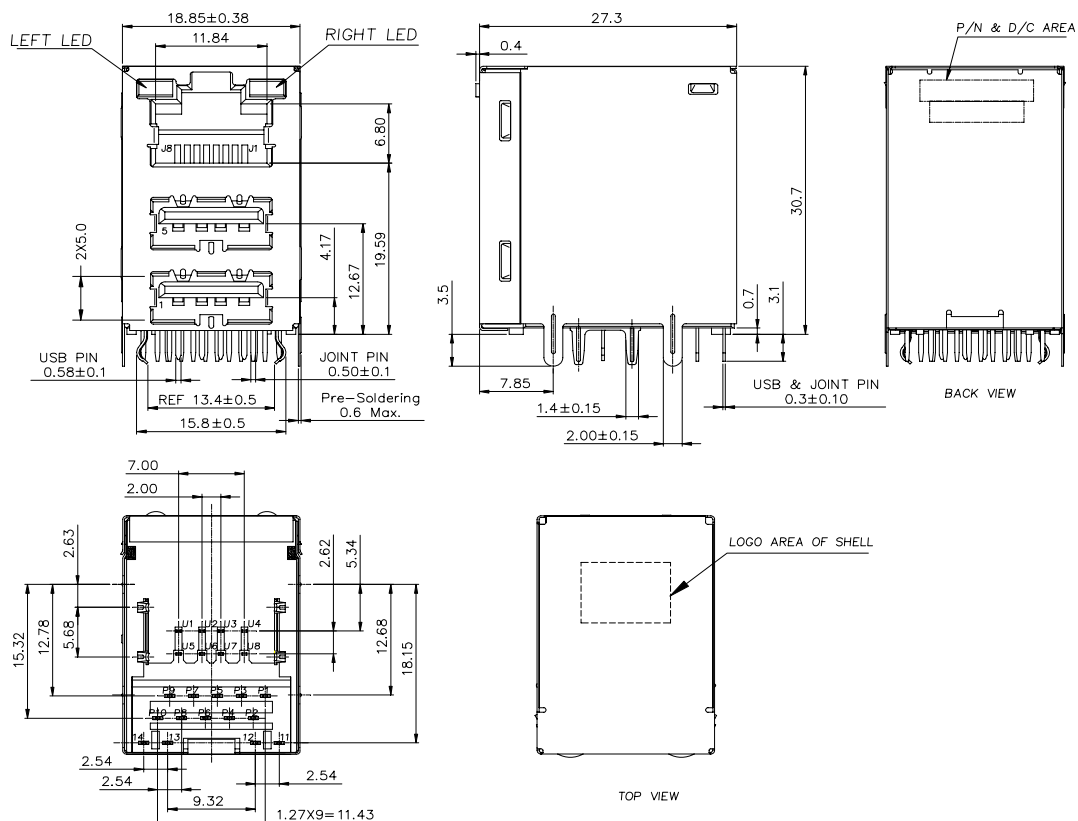
### 2.1 Commercial standards, specifications and report

2.1.1 MIL-STD-1344A

2.1.2 EIA-364

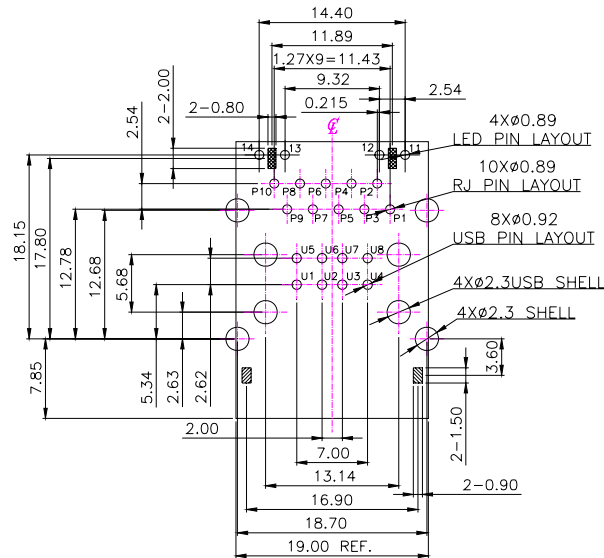
## 3 MECHANIC DIMENSIONS

### 3.1 Dimensions



General Tolerance :   .X   : ±0.38  
                                   .XX   : ±0.25

## 3.2 Pin Assignment For PCB Layout



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

## 3.3 USB Pin Define

PIN No.	U1	U2	U3	U4
	U5	U6	U7	U8
Signal Name	VBUS	D-	D+	GND

## 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 : 1-3 $\mu$ " Au+30 $\mu$ " Pd-Ni

( b ) Solder tail Area : 100 $\mu$ " Matted Tin.

( c ) Underplating : 50 $\mu$ " Min Nickel over all

##### 4.2.1.2 USB Contact: Phosphor Bronze

Finish : ( a ) Contact Area : 1-3 $\mu$ " Au+30 $\mu$ " Pd-Ni

( b ) Solder tail Area: 100 $\mu$ " Matted Tin.

( c ) Underplating : 50 $\mu$ " Min Nickel over all

##### 4.2.1.3 RJ Footer : Brass

Finish : 100  $\mu$ " Matted Tin on 50 $\mu$ " Min Nickel over all

##### 4.2.1.4 LED Footer : Brass

Finish : 100  $\mu$ " Matted Tin on 50 $\mu$ " Min Nickel over all

## 4.2.2 Plastic Part :

4.2.2.1 Housing, Spacer : Thermoplastic, PBT, Black  
 Flame Class : UL 94V-0

## 4.2.3 Shell

4.2.3.1 Front Shell : Stainless Steel  
 4.2.3.2 Back Shell : Stainless Steel  
 4.2.3.3 USB Grounding Leg : Metal  
 Finish : 100μ” Tin on 50μ” Min Nickel over all  
 4.2.3.4 Shell of Grounding Pin : pre-soldering Sn

## 4.2.4 LED Lamp

Emitting color	$\lambda_p$ (nm)	$V_f@I_f=20mA$	$I_r@V_r=5V$
Green	565	1.7-2.6	10 uA max
Yellow	585	1.7-2.6	10 uA max
Orange	610	1.7-2.6	10 uA max

## 4.3 Operating and Storage Temperature

4.3.1 Operating Temperature : 0°C TO +70°C  
 4.3.2 Storage 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 Mechanical Characteristics

4.5.1 Mating force: RJ 22N Max; USB 35N Max.  
 4.5.2 Unmating force: RJ 22N Max; USB 10N Min.  
 4.5.3 Durability: RJ 1000 Cycles; USB 1500 Cycles.

## 4.6 Performance and Test Description

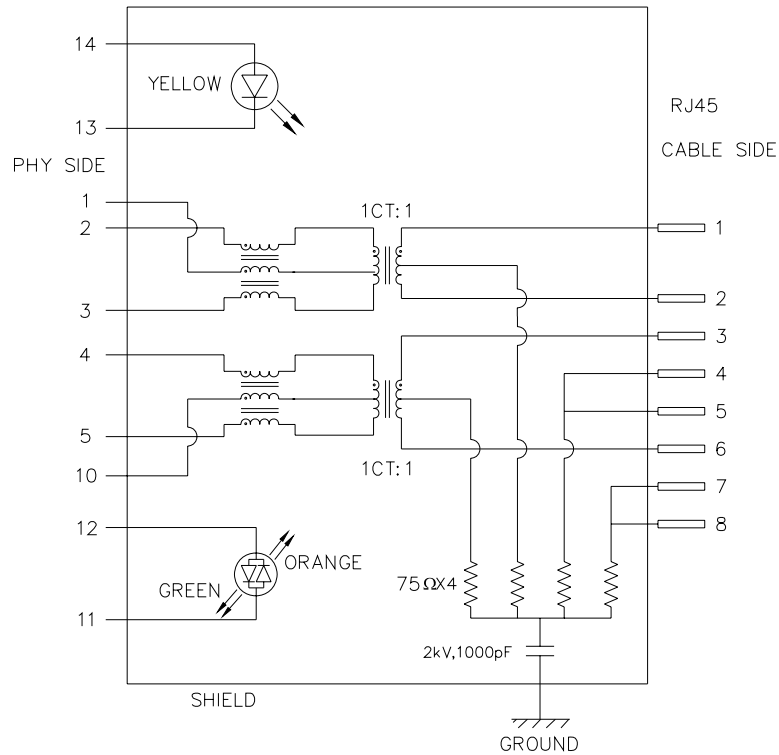
Product is designed to meet electrical, mechanical and environmental performance requirements. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

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

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

30~60 MHz -16dB MIN. load  $100\Omega$

60~80 MHz -12dB MIN. load  $100\Omega$

5.3 Common Mode Rejection

@ 1~100 MHz -30dB MIN.

5.4 Cross Talk

@ 1~100 MHz -35dB MIN.

5.5 Primary Inductance @ 100KHz, 0.1V, 8mA DC BIAS

P(2-3), P(4-5):  $350\mu H$  MIN.

5.6 Hi-Pot TEST

PRIMARY TO SECONDARY: 1500 VRMS OR 2250 VDC

## 6 ORDER INFORMATION

R U A    1    J    A - 4    JA    C - D    C    0 - 0    R  
           A    B    C        D    E        F        G    H            I    J

A: W/Shell; Shell Symmetry

B: W/O All Spring & W/USB Port

C: LED Polarity Code

A—LED Positive

D: LED Color

4—Left LED: Yellow      Right LED: Green/Orange

E: Schematic Code

JA—JA Type of the Circuit

F: Contact plating

C—1-3 $\mu$ ” Au+30 $\mu$ ” Pd-Ni

G: 8P10C    Input Pin Dim: 3.1mm

H: Plastic Material: PBT

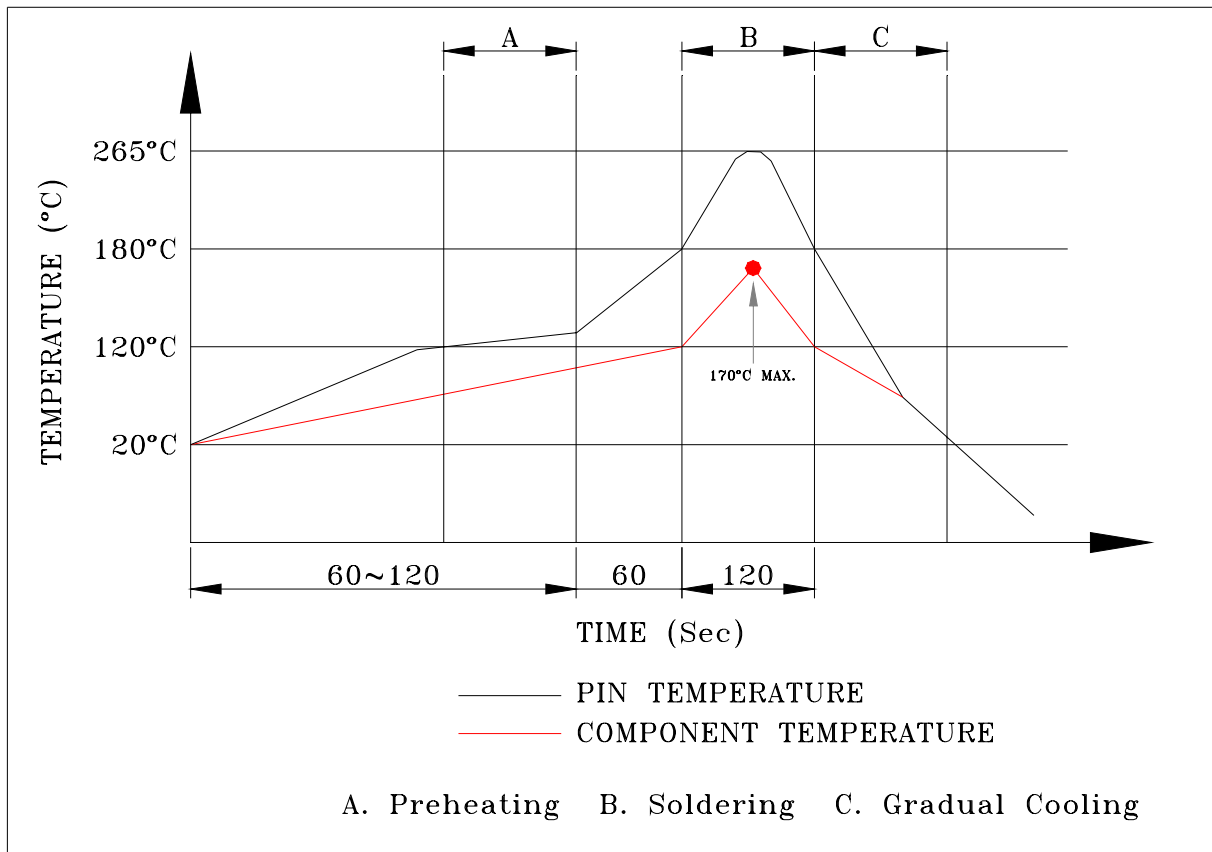
I: Packing type

0—TRAY

J: RoHS Compliant

# SPECIFICATION

## 7 Profile of Wave Solder



### SUGGESTED WAVE SOLDER CURVE

- (1) Tip temperature :  $265+5/-0^{\circ}\text{C}$
- (2) Tip temperature time : 3~5sec

单击下面可查看定价，库存，交付和生命周期等信息

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