

APPROVAL SHEET

To : _____

Spec No. : _____ Date : _____

UDE P/N Customer P/N
RD1-105BAG1A _____

Description : RJ45 1×1 w/ Transformer 10/100Base-T w/o LED

GP : GREEN PRODUCT

	Approved	Checked	Prepared
Name Date			

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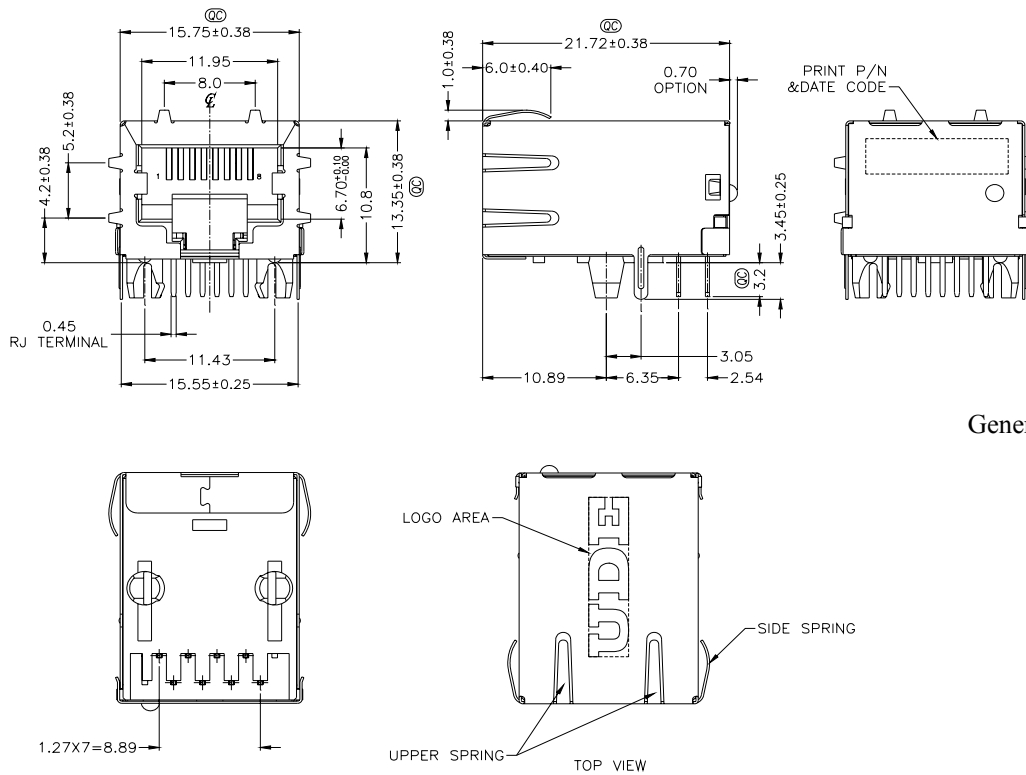
FAX : +886-3-2125143

Rev : XA

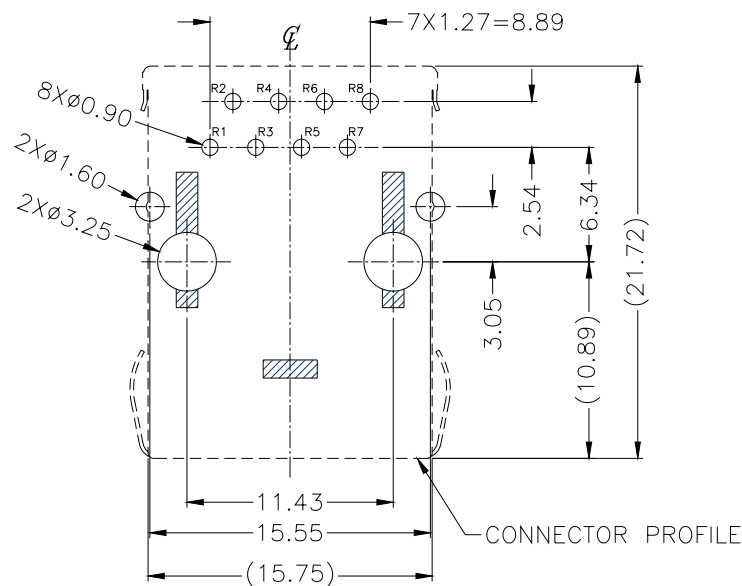
Update Date : 2005/12/29

1. MECHANIC DIMENSIONS

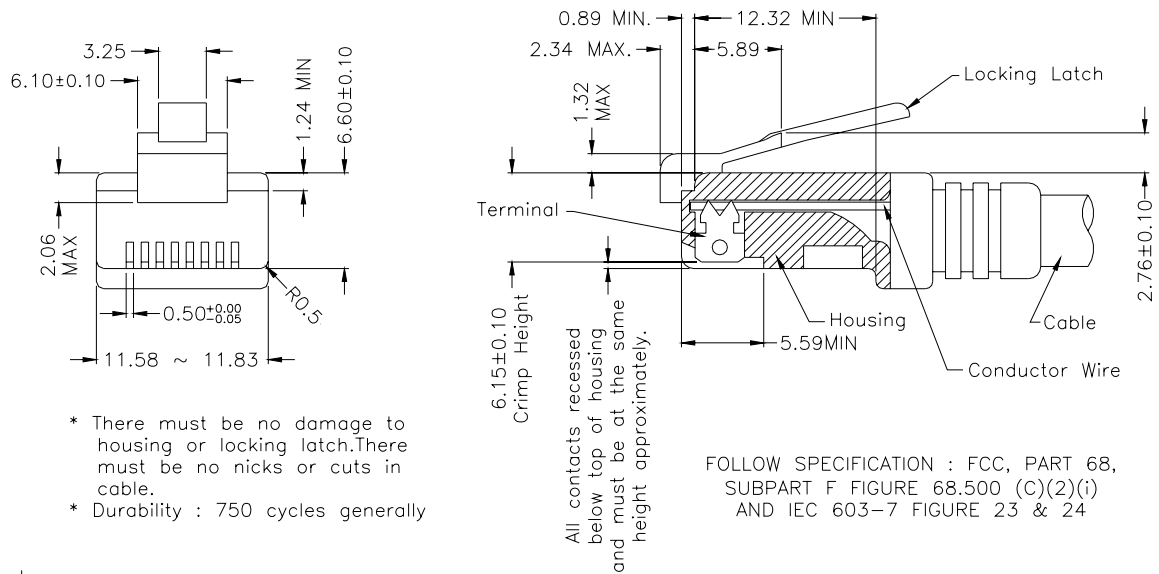
Dimensions



1.1. PCB Layout



1.2 RJ PLUG SPECIFICATION



STANDARD MODULAR PLUG ASSEMBLY

FOLLOW SPECIFICATION : FCC, PART 68, SUBPART F
FIGURE 68.500 (C)(2)(ii)

2. REQUIREMENTS

2.1. Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable

2.2. Materials

2.2.1. Terminal Parts :

2.2.1.1. RJ Terminal : Phosphor Bronze , Thickness=0.30mm

Finish : (a) Contact Area : Gold Flash

(b) Solder tail Area : $100\mu\text{m}$ min. Tin

(c) Underplating : $50\sim 100\mu\text{m}$ Nickel over all

2.2.1.2. Input Terminal : Brass , Thickness=0.35mm

Finish : $100\mu\text{m}$ min. Tin over $50\sim 100\mu\text{m}$ min. Nickel

2.2.1.3. Link Terminal : Brass , Thickness=0.25mm

Finish : $100\mu\text{m}$ min. Tin over $50\sim 100\mu\text{m}$ min. Nickel

2.2.2. Plastic Parts :

2.2.2.1. Housing : Thermoplastic , PA46 , Black

UL FILE No. : E47960

Manufacturer : DSM Engineering Plastics

Grade : TE250F6

Flame Class : UL94 V-0

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2.2.2.2. Coil Case : Thermoplastic , PA46 , Black

UL FILE No. : E47960

Manufacturer : DSM Engineering Plastics

Grade : TE250F6

Flame Class : UL94 V-0

2.2.3. Shell Parts : Stainless, Thickness=0.20mm

Grounding Leg : Pre-soldering

2.3. Operating and Storage Temperature

2.3.1. Operating Temperature : 0 TO +70

2.3.2. Storage Temperature : -40 TO +85

2.4. RJ45 specifications:

2.4.1. Insulation Resistance: 500MΩMin

2.4.2. Dielectric Withstanding Voltage: 1000VAC Min

2.5. Performance and Test Description

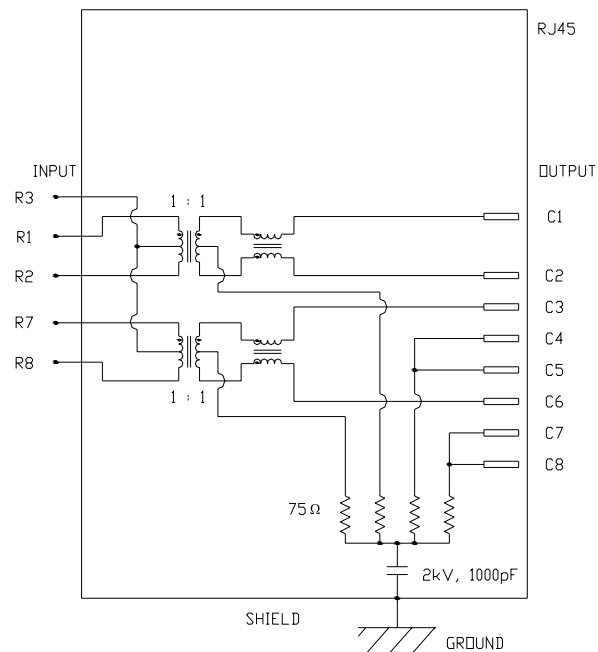
Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

2.6. Packaging and Packing

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

3. ELECTRICAL CHARACTERISTICS

3.1 Schematic



3.2 Transmitter filter & Receiver filter

Type : Balance low pass 100Ω impedance

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

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

30~60 MHz -16dB MIN. load 100Ω

60~80 MHz -12dB MIN. load 100Ω

3.3 Common Mode Rejection

@ 1~100 MHz -30dB MIN.

3.4 Cross Talk

@ 1~100 MHz -30dB MIN

3.6 INDUCTANCE @ 100KHz, 0.1V, 8mA DC BIAS

Input(R1-R2), Input(R7-R8) : 350μH MIN.

3.7 HiPot TEST

Input(R1-R2) to Output(C1-C2) : 1500VAC, 60sec

Input(R7-R8) to Output(C3-C6) : 1500VAC, 60sec

Product Number: RD1-105BAG1A

4. ORDER INFORMATION

R D 1 - 1 X X X XXX X
A B C D

A: LED Code

	Left LED		Right LED	
	-L3/+L4	+L3/-L4	-L1/+L2	+L1/-L2
0	w/o	w/o	w/o	w/o
1	Green		Yellow	
2		Green		Yellow
3	Green		Green	Yellow
4	Yellow		Green	
5		Green	Yellow	Green
6	Green	Orange	Yellow	
7	Yellow		Green	Orange
8	Yellow		Orange	Green
9	Green	Orange	Green	
S	Green	Yellow	Green	Yellow

B : Spring & Logo Code

		SPRING				
		W/ ALL DIM A=1.0	W/O ALL	TOP ONLY DIM A=1.0	W/ ALL DIM A=2.0	TOP ONLY DIM A=2.0
LOGO	W/O	0	1	2	3	4
	W/	5	6	7	8	9

C : Board Lock , Post & Side Leg Code

Board Lock Post Side Leg	None Green Product		Green Product	
	Board Lock	Post	Board Lock	Post
Rear Side Leg	1	4	B	F
Front Side Leg	2	5	C	G

D : Schematic type

AG1 : AG1 Circuit

E : Terminal Contact Area Plating Code

A : Gold Flash

D : 15u" Au

F : 30u" Au

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4. DIPPING TEMPERATURE PROFILE

Dipping temperature profile

(Note) The measuring point for the specified temperature shall be on the soldered part of the leads

