



SPECIFICATION

SPEC. NO.: DG1412030 REV: A2

DATE: 18-Dec-2021

PRODUCT NAME: RJ45 1×1 Tab Up W/LED & W/All Spring W/Surge
Protection Gigabit Magnetic Module Transformer

PRODUCT NO: RJLS1A-4BQ3-BD0-0R (RoHS Compliant)

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LDR-RD-033 Rev.01

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Product Description : RJ45 1×1 Tab Up W/LED & W/All Spring W/Surge Protection Gigabit Magnetic Module Transformer

1 SCOPE

1.1 Content

1.1.1 This specification covers performance, tests and quality requirements for RJ45 1×1 Tab Up W/LED&W/All Spring W/Surge Protection Gigabit 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.

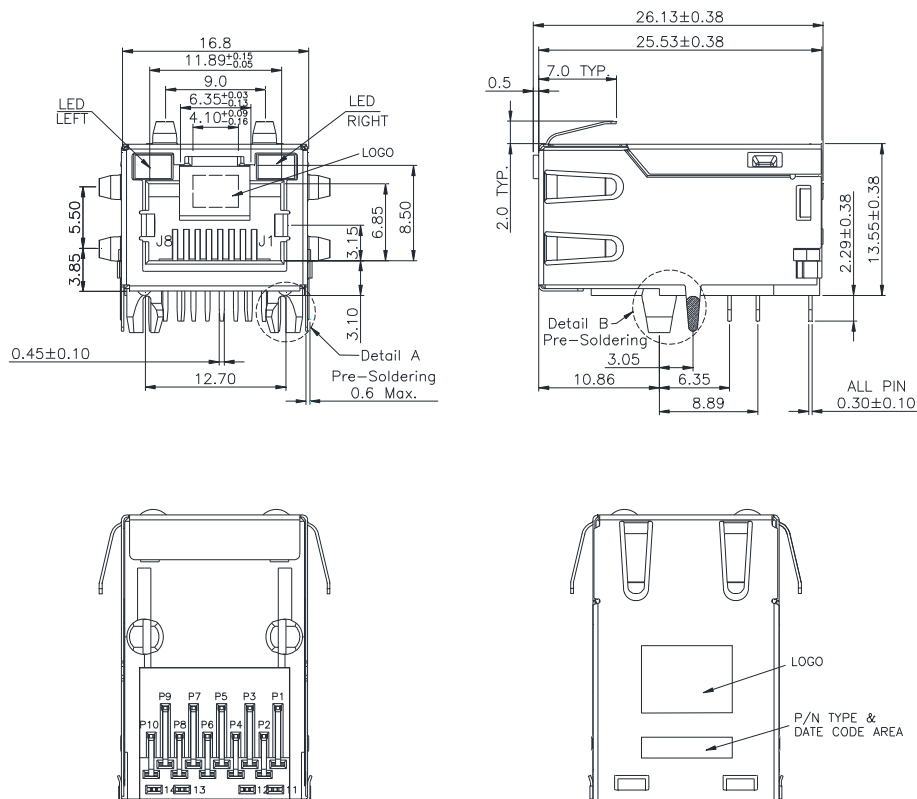
2.1 Commercial standards, specifications and report

2.1.1 MIL-STD-1344A

2.1.2 EIA-364

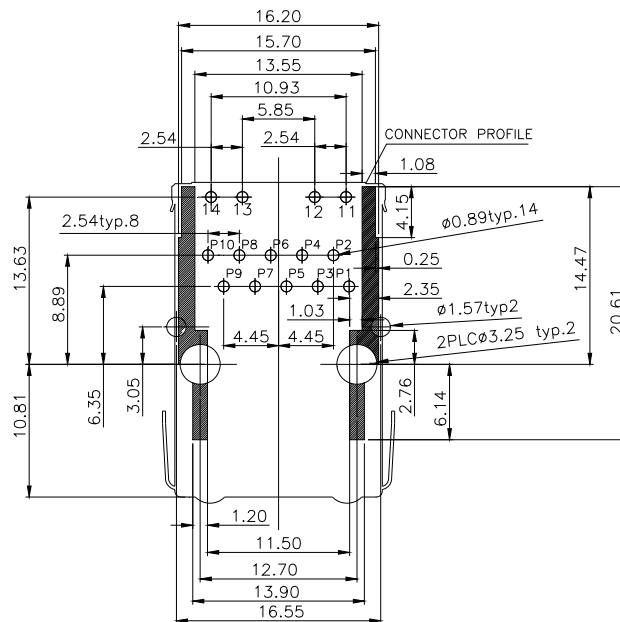
3 MECHANIC DIMENSIONS

3.1 Dimensions

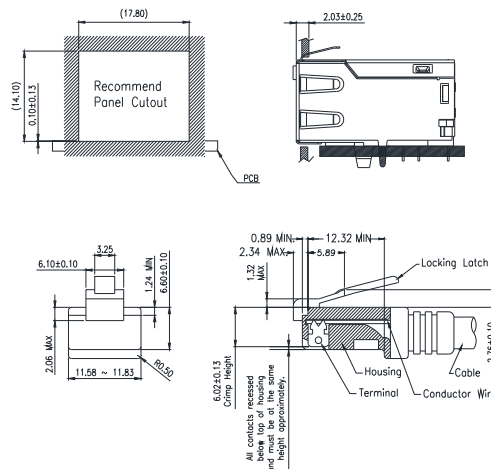


General Tolerance : .X : ±0.38
 .XX : ±0.25

3.2 Pins assignment for PCB Layout



3.3 Recommended Modular Plug



All dimensions follow :
FCC subpart F, 68.500, Figure (C)(2)(i)
IEC 60603-7

STANDARD MODULAR PLUG ASSEMBLY

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 : Copper alloy

Finish : (a) Contact Area : $30\mu\text{m}$ Au Min

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

(c) Underplating : 50μ” Min Nickel over all

4.2.1.2 Joint Contact : Copper alloy

Finish : 100μ” Matted Tin on 50μ” Min Nickel over all

4.3 Plastic Part :

4.3.1 Housing : High temperature Engineering plastic, PA46 or equivalent, Black

Flame Class : UL94V-0

4.3.2 Module : High temperature Engineering plastic, PA46 or equivalent, Black

Flame Class : UL94V-0

4.3.3 Shell

4.3.3.1 Front Shell : Stainless steel

4.3.3.2 Back Shell : Stainless steel

4.3.3.3 Shell of Grounding Pin : pre-soldering Sn

4.3.4 LED Lamp

Emitting color	λ p(nm)	Vf@If= 20mA	Ir@Vr=5V
Green	565-570	1.7-2.6	10 uA max
Yellow	585-590	1.7-2.6	10 uA max
Orange	600-610	1.7-2.6	10 uA max

4.4 Operating and Storage Temperature

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

4.4.2 Storage Temperature : -40°C TO +85°C

4.5 Mechanical Characteristics

4.5.1 Mating force : 20N MAX

4.5.2 Unmating force(w/o tab locking): 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°C , 3-5 seconds for 2 times.

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

4.7 Environmental Test:

4.7.1 Moisture Resistance : MSL level-1

4.7.2 Saving life: 1 year

4.7.3 Thermal shock cycle Test: Expose Sample connectors under the temperature changes between -40°C and 85°C 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°C for 168 hours. EIA-364-22B, Class shall be satisfied.

Humidity test: Subject Sample connector, to relative humidity 85%RH and a

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temperature of 85°C for 168 hours. It shall be subjected to standard atmospheric. Class shall be satisfied. MIL-STD-1344A.method:1002.2.

4.8 Performance and Test Description

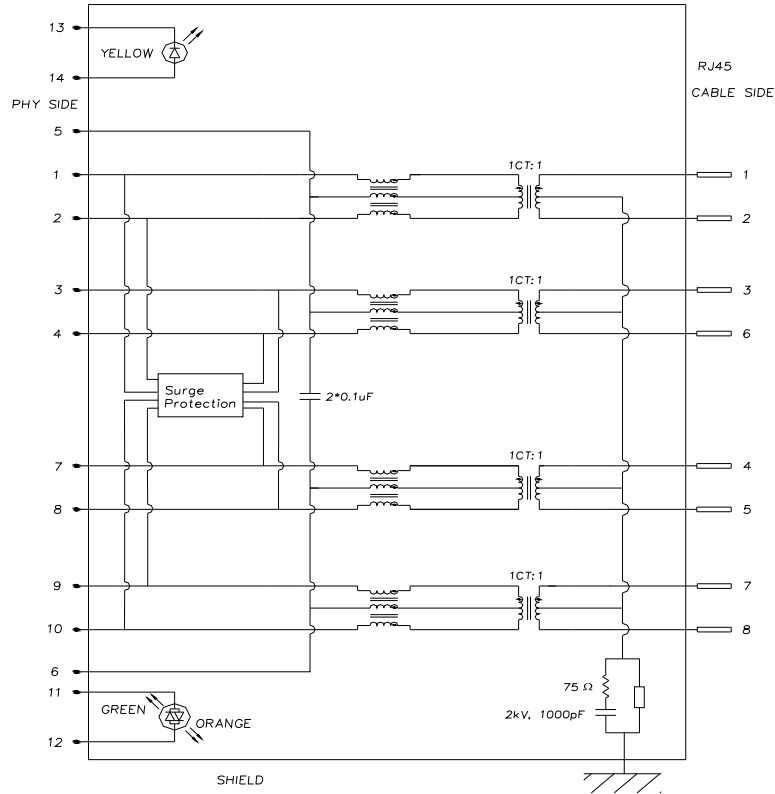
Product is designed to meet electrical, mechanical and environmental performance requirements. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

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



5.2 Insertion loss : 1-100 MHz -1.0dB MAX.
 100~125 MHz -1.2dB MAX.

Return loss : 1-30 MHz $-18\text{dB MIN. load } 100\text{ OHM}$
 30-60 MHz $-16\text{dB MIN. load } 100\text{ OHM}$
 60-80 MHz $-12\text{dB MIN. load } 100\text{ OHM}$
 80-100 MHz $-10\text{dB MIN. load } 100\text{ OHM}$

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(3-4), P(7-8), P(9-10): 350uH MIN

5.6 Hi-Pot TEST
 PRIMARY TO SECONDARY: 1500 VRMS OR 2250 VDC.

5.7 Surge Protection:
 IEC 61000-4-5(Lightning) 12A(10/700uS)
 Line to Line: 2KV Line to Ground: 6KV

6 ORDER INFORMATION

R J L S1 A - 4 BQ 3 - B D 0 - 0 R
 A B C D E F G H I

A: W/Front Shell & Back Shell; W/All Spring

B: LED Polarity Code

A—LED Positive

C: LED Code

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

D: Schematic Code

BQ—BQ Type of the Circuit

E: Contact Plating

3—30μ” Au Min

F: 8P10C Input Pin Dim: 2.29mm

G:

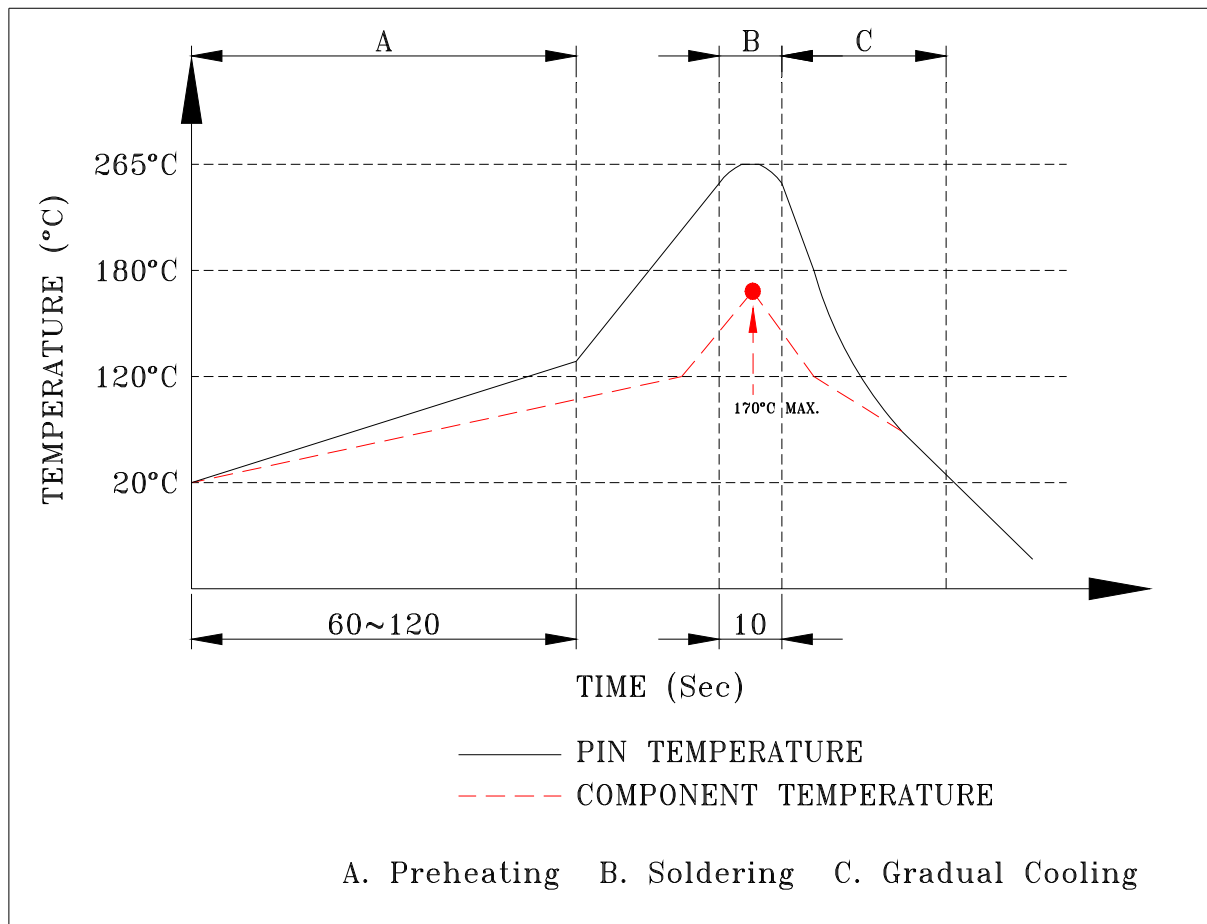
OPTION CODE	RJ INPUT PIN	LED INPUT PIN DIM	BOARD LOCK DIM	SHELL LEG
D	10 PIN	5.85mm	12.70mm	REAR

H: Packing Type

0—Tray

I: R—RoHS Compliant

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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