

Additional Resources: Product Page

date 08/05/2022

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# MODEL: PJ-099H-LED | DESCRIPTION: DC POWER JACK

#### **FEATURES**

- 1.65 mm center pin
- 5.0 A rating
- shielded
- vertical orientation
- LED





#### **SPECIFICATIONS**

| parameter                       | conditions/description   | min | typ   | max      | units     |
|---------------------------------|--|-----|-------|----------|-----------|
| rated input voltage             |  |     | 24    |          | Vdc       |
| rated input current             |  |     |       | 5.0      | А         |
| contact resistance <sup>1</sup> | between terminal and mating plug<br>between terminal in a closed circuit |     |       | 50<br>30 | $m\Omega$ |
| insulation resistance           | at 500 Vdc between adjacent contacts                                     | 100 |       |          | МΩ        |
| voltage withstand               | for 1 minute, 0.5 mA between adjacent contacts                           |     |       | 500      | Vac       |
| insertion/withdrawal force      |  | 0.3 |       | 3        | kg        |
| operating temperature           |  | -25 |       | 85       | °C        |
| life                            | at a rate of 24 cycles/minute  |     | 5,000 |          | cycles    |
| flammability rating             | UL94V-0  |     |       |          |           |
| RoHS                            | yes  |     |       |          |           |

# **SOLDERABILITY**

| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for max 5 seconds      |     |     | 300 | °C    |



When measured at a current of less than 190 mA/1 kHz
All specifications measured at 10-35°C, humidity at 45-85%, under standard atmospheric pressure, unless otherwise noted.

# LED ABSOLUTE MAXIMUM RATINGS (TA=25°C)

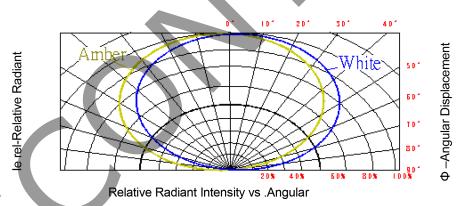
| parameter                                 | conditions/description | min | typ | max      | units    |
|---|------------------------|-----|-----|----------|----------|
| power dissipation (PD)                    | amber<br>white         |     |     | 52<br>74 | mW<br>mW |
| DC forward current (IF)                   | amber<br>white         |     |     | 20<br>20 | mA<br>mA |
| pulsed forward current (IFP) <sup>3</sup> | amber<br>white         |     |     | 90<br>90 | mA<br>mA |
| reverse voltage (VR)                      | amber<br>white         |     |     | 5 5      | V        |

Note: 3. Duty cycle 1/10, pulse width 0.1 ms.

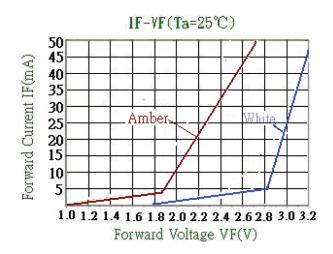
# LED ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C)

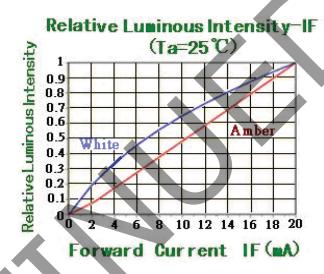
| parameter               | conditions/de | scription      |        | min         | typ          | max           | units      |
|-------------------------|---------------|----------------|--------|-------------|--------------|---------------|------------|
| forward voltage (Vf)    | at If=20 mA   | amber<br>white |        | 1.7<br>2.8  | 2.0<br>3.3   | 2.6<br>3.7    | V<br>V     |
| luminous intensity (Iv) | at If=20 mA   | amber<br>white |        | 37.6<br>100 | 520          | 192.4<br>1150 | mcd<br>mcd |
|                         |               | amber          |        | 600         |              | 612           | nm         |
| wavelength (λd)         | at If=20 mA   | white          | X<br>Y |             | 0.28<br>0.26 |               |            |
| reverse current (Ir)    | at Vr=5 V     |                |        |             |              | 10            | μA         |
| viewing angle (201/2)   | at If=20 mA   |                |        |             | 130          |               | deg        |

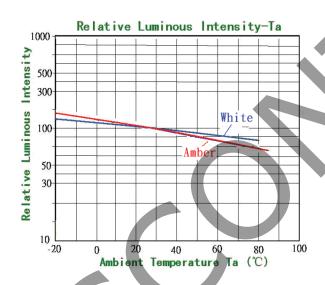
Note: 4. Luminous intensity ±10%; forward voltage ±0.1 V; wavelength ±0.5 nm, (X,Y) ±0.01 is standard testing.

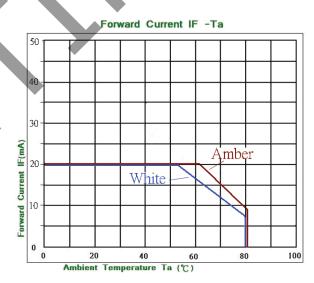


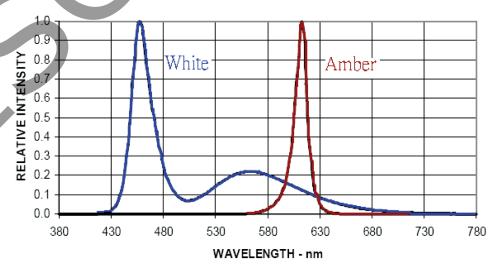
## LED CHARACTERISTIC CURVES





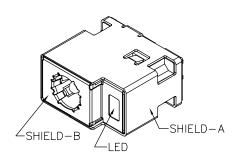




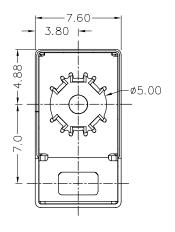


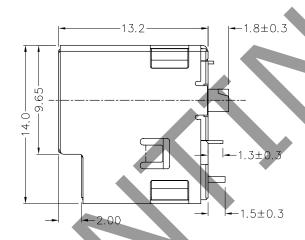
# **MECHANICAL DRAWING**

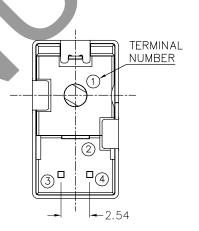
units: mm tolerance: X.X ±0.2 mm X.XX ±0.10 mm X.XXX ±0.050 mm

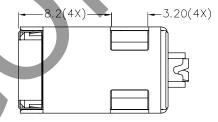


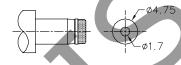
|            | MATERIAL        | PLATING    |
|------------|-----------------|------------|
| center pin | copper          | gold flash |
| terminal 1 | copper          | gold flash |
| terminal 2 | copper alloy    | gold flash |
| terminal 3 | iron alloy      | silver     |
| terminal 4 | iron alloy      | silver     |
| shield-A   | brass           | nickel     |
| shield-B   | stainless steel |            |
| insulator  | PA66            |            |
|            |                 |            |





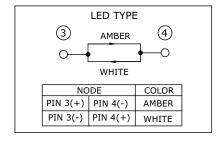






MATING PLUG Jack Insertion Depth: 8.4 mm

| SCHEMATIC  |             |
|------------|-------------|
|            | <u> </u>    |
| Model      | PJ-099H-LED |
| Center Pin | Ø1.65 mm    |



## **REVISION HISTORY**

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 12/17/2018 |
| 1.01 | brand update                 | 10/25/2019 |
| 1.02 | logo, datasheet style update | 08/05/2022 |

The revision history provided is for informational purposes only and is believed to be accurate.





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