

MODEL: PJ-050B | **DESCRIPTION:** DC POWER JACK

FEATURES

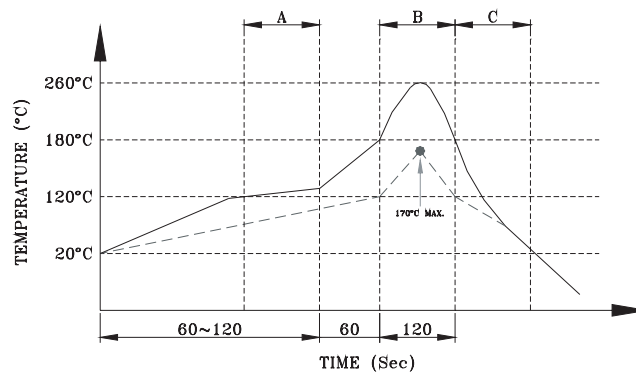
- 2.5 mm center pin
- 2.5 A rating
- right-angle orientation
- through hole
- pick-n-place top


SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|----------------------------|--|-----|-------|-----------|----------|
| rated input voltage | | | 24 | | Vdc |
| rated input current | | | | 2.5 | A |
| contact resistance | between terminal and mating plug between terminal in a closed circuit | | | 100 30 | mΩ mΩ |
| insulation resistance | at 500 Vdc | 100 | | | MΩ |
| voltage withstand | for 1 minute | | | 500 | Vac |
| insertion/withdrawal force | | 0.3 | | 3 | kg |
| operating temperature | | -25 | | 85 | °C |
| life | | | 5,000 | | cycles |
| flammability rating | UL94V-0 | | | | |
| RoHS | yes | | | | |

SOLDERABILITY

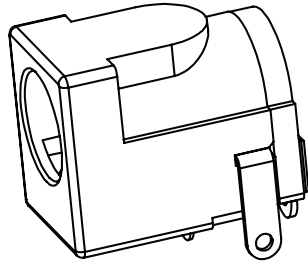
| parameter | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| wave soldering | for max 5 seconds | 255 | 260 | 265 | °C |



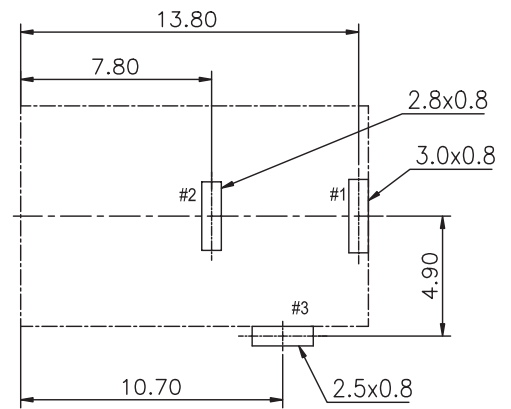
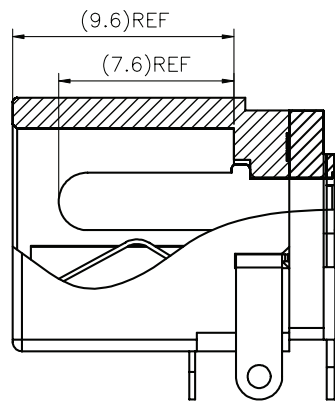
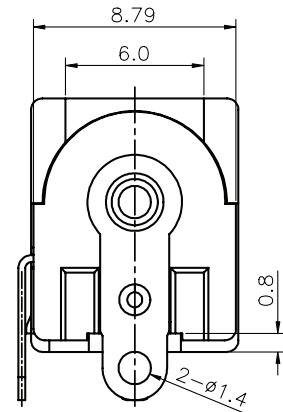
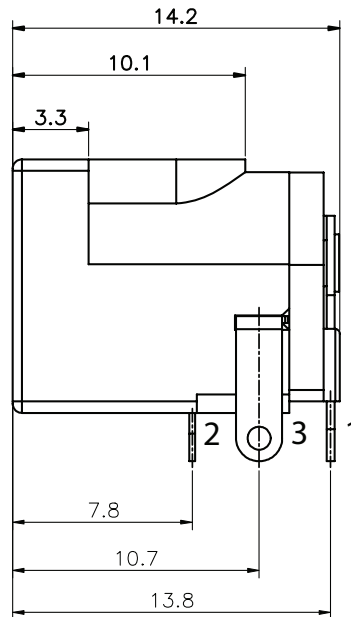
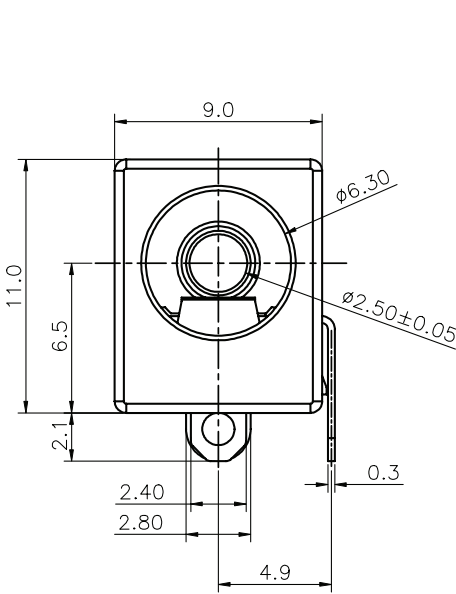
- A. Preheating
 B. Soldering
 C. Cooling
- Pin Temperature
 - - - Component Temperature

MECHANICAL DRAWING

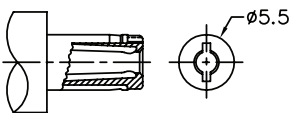
units: mm
 tolerance:
 X.X ±0.20 mm
 X.XX ±0.15 mm
 X.XXX ±0.10 mm
 PCB: ±0.05 mm
 unless otherwise specified



| DESCRIPTION | MATERIAL | PLATING/COLOR |
|-------------|--------------------|---------------|
| center pin | copper alloy (H65) | nickel |
| terminal 1 | C2680 t=0.35 | nickel-silver |
| terminal 2 | C5210 t=0.25 | nickel-silver |
| terminal 3 | C2680 t=0.30 | nickel-silver |
| cover | PA9T (UL94V-0) | black |
| housing | PA9T (UL94V-0) | black |



Recommended PCB Layout
Top View



MATING PLUG
Jack Insertion Depth: 9.6 mm

| | |
|------------|---------|
| SCHEMATIC | |
| Model | PJ-050B |
| Center Pin | Ø2.5 mm |

REVISION HISTORY

| rev. | description | date |
|------|---|------------|
| 1.0 | initial release | 07/30/2007 |
| 1.01 | applied new spec template | 10/21/2013 |
| 1.02 | increased voltage rating | 04/14/2016 |
| 1.03 | increased operating temperature range | 11/02/2017 |
| 1.04 | brand update | 11/05/2019 |
| 1.05 | logo, datasheet style update | 08/05/2022 |
| 1.06 | product reengineered for improved manufacturability and production yield, see PCN for details | 03/01/2023 |

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



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