

# MPCB025 Series PCB Slip Ring

MPCB025 ultrathin pancake series slip ring, adopt PCB substrate, thickness can up to 5.8 mm, which made of super hard gold plating, super thick copper foil process, maximum current can up to 10A, color-coded lead wires are used on both the stator and rotor for simplified electrical connections.



## Part# Explanation

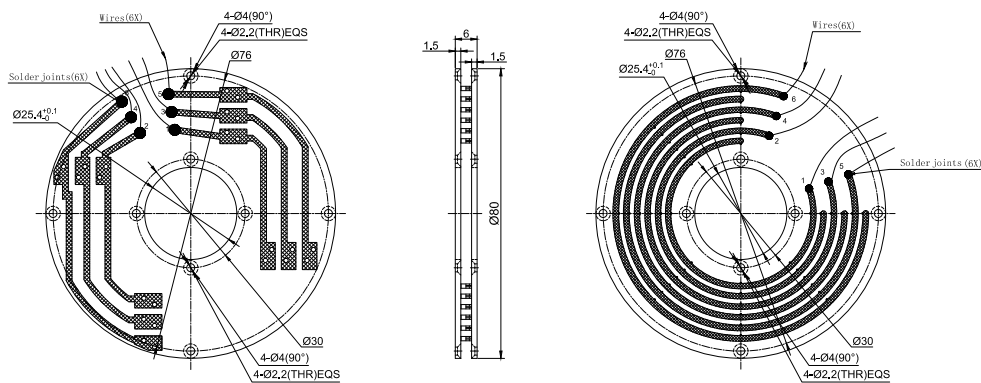
|                             |  |                               |
|-----------------------------|--|-------------------------------|
| <b>MPCB 025 - S 06 - VC</b> |  | Products quality level        |
| MPCB: PCB slip ring         |  | VC common quality version     |
| 025: ID25.4mm               |  | VD industrial quality version |
|                             |  | Default =VC version           |
|                             |  | 06: 6 rings(0~5A)             |
|                             |  | S: Signal ring                |

## Parts# List

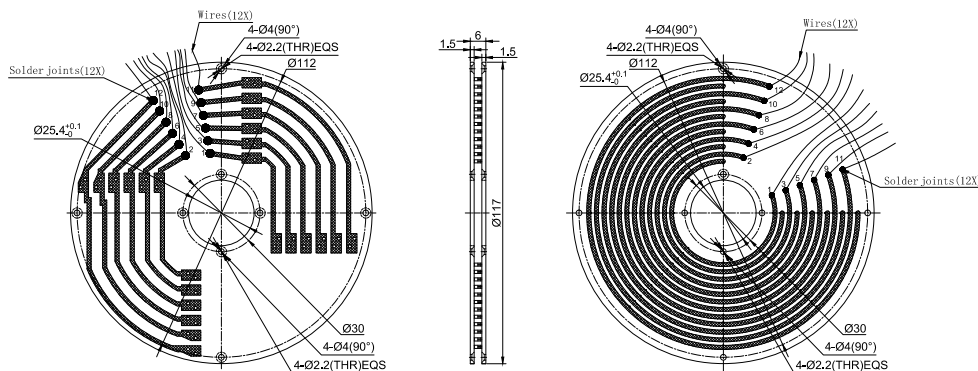
| MPCB025 Series Parts# List |     |              |       |             |     |              |       |
|----------------------------|-----|--------------|-------|-------------|-----|--------------|-------|
| Part#                      | 10A | Signal or 5A | Rings | Part#       | 10A | Signal or 5A | Rings |
| MPCB025-S06                | 0   | 6            | 6     | MPCB025-S12 | 0   | 12           | 12    |

Note: 1) N channels 5A rings parallel can be used as 1 channel N\*5A current. For example: 2 rings 5A parallel could be used as 1 wires 10A  
2) ID and circuits can be customized according to customers' requirements, plz contact with sales representative

## 1. MPCB025-S06 dimensions



## 2. MPCB025-S12 dimensions



## Specifications

| Mechanical Data     |                                 | Electrical Data       |                               |                     |
|---------------------|---------------------------------|-----------------------|-------------------------------|---------------------|
| Parameter           | Value                           | Parameter             | Value                         |                     |
| Working Life        | See Product Quality Level Table |                       | Power                         | Signal              |
| Rotating Speed      | See Product Quality Level Table | Rated Voltage         | 0~440VAC/VDC                  | 0~240VAC/VDC        |
| Working Temperature | -30°C~80°C                      | Insulation Resistance | ≥1000MΩ/500VDC                | ≥1000MΩ/500VDC      |
| Operating Humidity  | 0~85% RH                        | Lead Wires            | AWG16#Silicone Wire           | AWG22#Silicone Wire |
| Contact Material    | See Product Quality Level Table | Lead Length           | Standard 300mm ( adjustable ) |                     |
| Contact Material    | Aluminum alloy                  | Dielectric Strength   | 500VAC@50Hz , 60s             |                     |
| Torque              | 0.05N.m ; +0.03N.m/6rings       | Electrical Noise      | <0.01Ω                        |                     |
| Protection Grade    | IP41                            |                       |                               |                     |

## Product Quality Level Table

| Products Level Code | Max Rotating Speed | Working Life    | Contact Material |
|---------------------|--------------------|-----------------|------------------|
| VC                  | 100RPM             | 5 Million Revs  | Precious Metal   |
| VD                  | 300RPM             | 20 Million Revs | Gold-Gold        |

## Lead Wires Color Code

| Ring  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Color | BLK | RED | YEL | GRN | BLU | WHT | BLK | RED | YEL | GRN | BLU | WHT |

(6 wires for 1 group color, from 7-12, repeat the same color as 1...6, indicated with number code pipe).

## Options for custom slip ring

Note : The following special requirements can be customized, lead time will increase 3 ~ 15 days, cost increased 5% ~ 50%, most of basic parts have standardized, modular, customized also can greatly reduce the cost and lead time.

- 1) Can be customized for different bore size.
- 2) Can be customized for different circuits.
- 3) Can add housing for protection



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