

QRJ2-18000-64

Channel 1, DC~18GHz, Channel 2, DC~4.5GHz, 64mm

- | | |
|-------------------------------|------------------------------|
| Features: | Applications: |
| * Low VSWR | * High Speed Digital Signal |
| * Low VSWR Flatness | Transmission |
| * Low Insertion Loss Flatness | * Analog Signal Transmission |

Electrical (Rotary Joint)

| | |
|-----------------------------|--------------------|
| Frequency (Channel 1): | DC~18GHz |
| Frequency (Channel 2): | DC~4.5GHz |
| VSWR (Channel 1): | 1.5 max. |
| VSWR Flatness: | 0.04 max. |
| VSWR (Channel 2): | 2.5 max. |
| VSWR Flatness: | 0.36 max. |
| Insertion Loss (Channel 1): | 0.48dB max. |
| Insertion Loss Flatness: | 0.05 dB max. |
| Insertion Loss (Channel 2): | 0.98dB max. |
| Insertion Loss Flatness: | 0.25 dB max. |
| Phase Flatness (Channel 1): | 1° max. |
| Phase Flatness (Channel 2): | 2° max. |
| Isolation: | 60dB typ. |
| Average Power: | 50W max. |
| Peak Power: | 3000W max. |
| IP Grade: | IP 60 per EN 60529 |

Mechanical (Rotary Joint)

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|------------------|------------|
| Connectors: | SMA female |
| Rotating Speed: | 60RPM max. |
| Starting Torque: | 5N.cm max. |
| Rotating Torque: | 5N.cm max. |
| Operation Life: | 10M Cycles |
| Dielectric: | PTFE |

Environmental

| | |
|-----------------------------|-----------|
| Temperature (Rotary Joint): | -40~+70°C |
| Temperature (Slip Ring): | -30~+80°C |

Color Code of Lead Wire

| | | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---------|
| Ring | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Color | BLK | BRN | RED | ORG | YEL | GRN | BLU | PUR | GRY | WHT | PINK | LGT BLU |

| | | | | | | | | | | | | |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------|
| Ring | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Color | WHT/BLK | WHT/BRN | WHT/RED | WHT/ORG | WHT/YEL | WHT/GRN | WHT/BLU | WHT/PUR | WHT/GRY | BLK/RED | BLK/BRN | Transparent |

Remark: "1" : the first wire from rotor side , QRJ2-18000-64-12S wire color sequence: BLK/BRN/RED/ORG/YEL/GRN/BLU/PUR/GRY/WHT/PINK/LGT BLU, 24 color wires as one group, if more than 24wires, repeat as sequence, use number tube to tell group 1#, 2#....

Electrical (Slip Ring)

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|-----------------------------------------|-----------------------------|
| Voltage (Power/Signal): | 0~440V/0~240V |
| Impedance of Dielectric (Power/Signal): | 500/300MΩ min. |
| Lead Wire (Power): | AWG#17 Silver plated Teflon |
| Lead Wire (Signal): | AWG#22 Silver plated Teflon |
| Dielectric Resistance: | 500V AC @50Hz, 60s |
| Electrical Noise: | 0.01Ω max. |
| IP Grade: | IP51 |

Mechanical (Slip Ring)

| | |
|-------------------|-------------------------------|
| Operation Life: | 10M Cycles |
| Rotating Speed: | 250RPM max. |
| Contact Material: | Gold |
| Housing: | Aluminum alloy |
| Torque: | 0.01N.m @6 Channels + 0.05N.m |

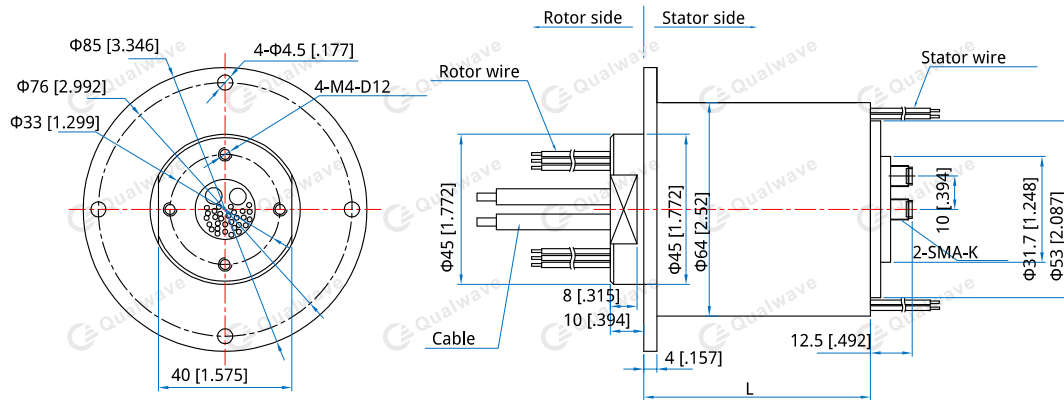
How To Order

QRJ2-18000-64-X-Y

X: Power Circuits
For example:
0610 - 6 circuits@10A
Y: Signal Circuits
For example:
06S - 6 circuits signal@2A

Customization is available upon request.

Outline Drawings



Unit: mm [in] Tolerance: $\pm 0.2\text{mm}$ [$\pm 0.008\text{in}$]

Standard Part Number List

| Part Number | RF Channel | Frequency (GHz) | Circuits no. (10A) | Circuits no. (2A) | Length L(mm/in) |
|--------------------|------------|-----------------|--------------------|-------------------|-----------------|
| QRJ2-18000-64-0610 | 2 | DC-18 | 6 | 0 | 38 [1.496] |
| QRJ2-18000-64-06S | 2 | DC-18 | 0 | 6 | 38 [1.496] |
| QRJ2-18000-64-12S | 2 | DC-18 | 0 | 12 | 56 [2.205] |
| QRJ2-18000-64-18S | 2 | DC-18 | 0 | 18 | 74 [2.913] |
| QRJ2-18000-64-24S | 2 | DC-18 | 0 | 24 | 92 [3.622] |