

FRJ2-18000-64

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

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|-------------------------------|------------------------------|
| 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)

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 , FRJ2-18000-64-12S 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)

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

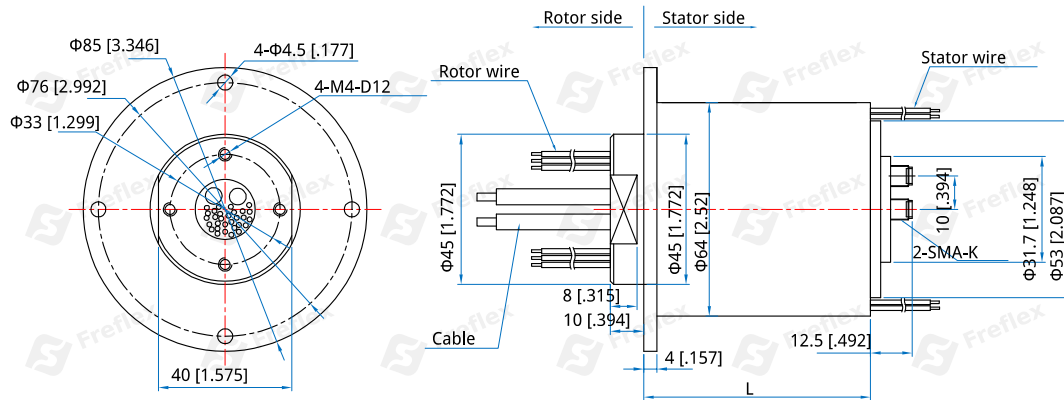
How To Order

FRJ2-18000-64-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)
FRJ2-18000-64-0610	2	DC~18	6	0	38 [1.496]
FRJ2-18000-64-06S	2	DC~18	0	6	38 [1.496]
FRJ2-18000-64-12S	2	DC~18	0	12	56 [2.205]
FRJ2-18000-64-18S	2	DC~18	0	18	74 [2.913]
FRJ2-18000-64-24S	2	DC~18	0	24	92 [3.622]