

FRJ2-4500-99

Channel 2, DC~4.5GHz, 99mm

Features:

- * Low VSWR
- * Low VSWR Flatness
- * Low Insertion Loss Flatness

Applications:

- * High Speed Digital Signal Transmission
- * Analog Signal Transmission

Electrical (Rotary Joint)

Frequency:	DC~4.5GHz
VSWR (Channel 1):	1.3 max.
VSWR Flatness:	0.05 max.
VSWR (Channel 2):	1.6 max.
VSWR Flatness:	0.2 max.
Insertion Loss (Channel 1):	0.3dB
Insertion Loss Flatness:	0.05dB
Insertion Loss (Channel 2):	0.5dB
Insertion Loss Flatness:	0.15dB
Impedance:	50Ω

Mechanical (Rotary Joint)

Connectors:	SMA female
Rotating Speed:	30RPM
Rotating Torque:	0.1Nm +0.03Nm/Circuits no. 6
Operation Life:	5M Cycles
Contact Material:	Gold
Housing:	Aluminum alloy
IP Grade:	IP51

Environmental

Operating Temperature:	-30~+80°C -45~+85°C (Military optional)
Operating Humidity:	0~85% 0~97% (Military optional)

Electrical (Slip Ring)

Voltage (Power):	0~440VAC/VDC
Voltage (Signal):	0~240VAC/VDC
Impedance of Dielectric:	1000MΩ/500VDC min.
Lead Wire (Power):	AWG#16 Silver plated Teflon
Lead Wire (Signal):	AWG#22 Silver plated Teflon
Wire Length:	Standard length 300mm (adjustable upon request)
Dielectric Resistance:	500VAC@50Hz, 60s
Electrical Noise:	0.01Ω max.

How To Order

FRJ2-4500-99-X-Y

X: Power Circuits

For example:

0610 - 6 circuits@10A

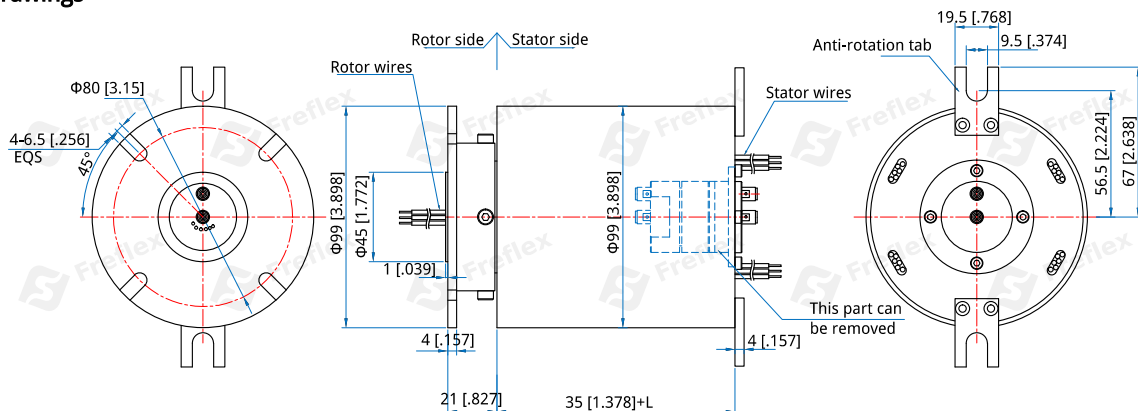
Y: Signal Circuits

For example:

06S - 6 circuits signal@5A

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. (5A)	Length L (mm/in)
FRJ2-4500-99-02S	2	DC~4.5	0	2	31.6 [1.244]
FRJ2-4500-99-0210	2	DC~4.5	2	0	31.6 [1.244]
FRJ2-4500-99-03S	2	DC~4.5	0	3	35 [1.378]
FRJ2-4500-99-0310	2	DC~4.5	3	0	35 [1.378]
FRJ2-4500-99-06S	2	DC~4.5	0	6	45.2 [1.78]
FRJ2-4500-99-0210-04S	2	DC~4.5	2	4	45.2 [1.78]
FRJ2-4500-99-0410-02S	2	DC~4.5	4	2	45.2 [1.78]
FRJ2-4500-99-0610	2	DC~4.5	6	0	45.2 [1.78]
FRJ2-4500-99-12S	2	DC~4.5	0	12	65.6 [2.583]
FRJ2-4500-99-0210-10S	2	DC~4.5	2	10	65.6 [2.583]
FRJ2-4500-99-0310-09S	2	DC~4.5	3	9	65.6 [2.583]
FRJ2-4500-99-0610-06S	2	DC~4.5	6	6	65.6 [2.583]
FRJ2-4500-99-0810-04S	2	DC~4.5	8	4	65.6 [2.583]
FRJ2-4500-99-1010-02S	2	DC~4.5	10	2	65.6 [2.583]
FRJ2-4500-99-1210	2	DC~4.5	12	0	65.6 [2.583]
FRJ2-4500-99-18S	2	DC~4.5	0	18	86 [3.386]
FRJ2-4500-99-0210-16S	2	DC~4.5	2	16	86 [3.386]
FRJ2-4500-99-0410-14S	2	DC~4.5	4	14	86 [3.386]
FRJ2-4500-99-0610-12S	2	DC~4.5	6	12	86 [3.386]
FRJ2-4500-99-0810-10S	2	DC~4.5	8	10	86 [3.386]
FRJ2-4500-99-1010-08S	2	DC~4.5	10	8	86 [3.386]
FRJ2-4500-99-1210-06S	2	DC~4.5	12	6	86 [3.386]
FRJ2-4500-99-1410-04S	2	DC~4.5	14	4	86 [3.386]
FRJ2-4500-99-1610-02S	2	DC~4.5	16	2	86 [3.386]
FRJ2-4500-99-24S	2	DC~4.5	0	24	106.4 [4.189]
FRJ2-4500-99-0410-20S	2	DC~4.5	4	20	106.4 [4.189]
FRJ2-4500-99-0610-18S	2	DC~4.5	6	18	106.4 [4.189]
FRJ2-4500-99-1210-12S	2	DC~4.5	12	12	106.4 [4.189]
FRJ2-4500-99-1810-06S	2	DC~4.5	18	6	106.4 [4.189]
FRJ2-4500-99-2410	2	DC~4.5	24	0	106.4 [4.189]
FRJ2-4500-99-30S	2	DC~4.5	0	30	126.8 [4.992]
FRJ2-4500-99-0610-24S	2	DC~4.5	6	24	126.8 [4.992]
FRJ2-4500-99-1210-18S	2	DC~4.5	12	18	126.8 [4.992]
FRJ2-4500-99-1810-12S	2	DC~4.5	18	12	126.8 [4.992]
FRJ2-4500-99-2410-06S	2	DC~4.5	24	6	126.8 [4.992]
FRJ2-4500-99-3010	2	DC~4.5	30	0	126.8 [4.992]
FRJ2-4500-99-36S	2	DC~4.5	0	36	150.2 [5.913]
FRJ2-4500-99-0610-30S	2	DC~4.5	6	30	150.2 [5.913]
FRJ2-4500-99-1210-24S	2	DC~4.5	12	24	150.2 [5.913]
FRJ2-4500-99-3610	2	DC~4.5	36	0	150.2 [5.913]
FRJ2-4500-99-42S	2	DC~4.5	0	42	170.6 [6.717]

Rotary Joints

FRJ2-4500-99-0610-36S	2	DC~4.5	6	36	170.6 [6.717]
FRJ2-4500-99-1210-30S	2	DC~4.5	12	30	170.6 [6.717]
FRJ2-4500-99-48S	2	DC~4.5	0	48	193.2 [7.606]
FRJ2-4500-99-0610-42S	2	DC~4.5	6	42	193.2 [7.606]
FRJ2-4500-99-0910-39S	2	DC~4.5	9	39	193.2 [7.606]
FRJ2-4500-99-1210-36S	2	DC~4.5	12	36	193.2 [7.606]
FRJ2-4500-99-1810-30S	2	DC~4.5	18	30	193.2 [7.606]
FRJ2-4500-99-2410-24S	2	DC~4.5	24	24	193.2 [7.606]
FRJ2-4500-99-60S	2	DC~4.5	0	60	234 [9.213]
FRJ2-4500-99-0610-54S	2	DC~4.5	6	54	234 [9.213]
FRJ2-4500-99-0910-51S	2	DC~4.5	9	51	234 [9.213]
FRJ2-4500-99-1210-48S	2	DC~4.5	12	48	234 [9.213]
FRJ2-4500-99-72S	2	DC~4.5	0	72	277.8 [10.937]

Note: N 10A current loops combined can be used as 1 N * 10A current loop; For example, combining 2 rings of 10A together can be used as 1 circuit of 20A. The number of loops and current size can be customized. If you need assistance with selection, please contact customer service.