PRODUCT DATASHEET

JUMPER-L12F-FFP

CELLFLEX® Factory-Fit Jumper Assembly, 1/2" Low Loss Foam, with flame retardant jacket

Radio Frequency Systems' CELLFLEX® Factory-Fit Jumpers feature specially designed connectors which are soldered-on in a strictly controlled industrial process to ensure industry leading performance for today's high-performance wireless systems. The connector design and manufacturing process has been optimized to produce premium VSWR and IM levels. Injection molded boots provide reliable and repeatable additional sealing level and strain relief. Our facilities produce and stock all popular lengths as required by the industry, and can deliver custom lengths with premium VSWR and IM levels on request.



7M7MRL12F-0300FFP for EXAMPLE

FEATURES / BENEFITS

- **Stable premium VSWR, outstanding and consistent intermodulation performance - 4.3-10 side not relying on coupling torque**
  Improves network performance, reduces the number of dropped calls and avoids revenue loss.
- **Waterproof to IP 68**
  No downtime risk, secures revenue.
- **Smaller connector footprint for 4.3-10**
  Enables tighter spacing of connections for antennas and RRHs.
- **Available with standard ""J"" or flame retardant ""JFN"" jacket types**
  Usable in all applications.
- **Compliant to RoHS (EU) and CRoHS (China)**
  Usable on a global basis.

Technical features

STRUCTURE

Cable Type		1/2" Low Loss Foam
Jumper Type		Factory-Fit (Premium)
Dielectric		Foam Polyethylene
Gasket		Silicone rubber
Jacket		JFN: halogen free, non corrosive, flame retardant, low smoke, polyolefin, Test methods for fire behaviour of cable: IEC 60754-1/-2 halogen free, non corrosive, IEC 61034 low smoke emission, IEC 60332-1 flame retardant

MECHANICAL SPECIFICATIONS

Minimum Bend Radius	mm (in)	125 (5)

TESTING AND ENVIRONMENTAL

Sealing class		IP68

TEMPERATURE SPECIFICATIONS

Installation Temperature	°C (°F)	-25 to 60 (-13 to 140)
Operation Temperature	°C (°F)	-50 to 85 (-58 to 185)
Storage Temperature	°C (°F)	-70 to 85 (-94 to 185)

ELECTRICAL SPECIFICATIONS

Intermodulation, 3rd Order	dBc	≤ -159 static & dynamic (-161 typical)
Peak Power Rating	kW	8.1
RF Peak Voltage	Volts	900

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

JUMPER RETURN LOSS (VSWR), 0-30FT LENGTH

Frequency [MHz]	Straight / Straight [dB] (VSWR)	Right Angle / Right Angle [dB] (VSWR)
0 - 1000	>28.3 (≤1.08)	>28.3 (≤1.08)
>1000-1700	>28.3 (≤1.08)	>26.4 (≤1.10)
>1700-2200	>28.3 (≤1.08)	>26.4 (≤1.10)
>2200-2700	>26.4 (≤1.10)	>24.9 (≤1.12)
>2700-3800	>23.1 (≤1.15)	>20.8 (≤1.20)
>3800-5000	>20.8 (≤1.20)	>19.1 (≤1.25)
>5000-6000	>17.7 (≤1.30)	>17.7 (≤1.30)

JUMPER RETURN LOSS (VSWR), 31-60FT LENGTH

Frequency [MHz]	Straight / Straight [dB] (VSWR)	Right Angle / Right Angle [dB] (VSWR)
0 - 1000	>28.3 (≤1.08)	>28.3 (≤1.08)
>1000-1700	>26.4 (≤1.10)	>24.0 (≤1.14)
>1700-2200	>26.4 (≤1.10)	>24.0 (≤1.14)
>2200-2700	>24.9 (≤1.12)	>24.0 (≤1.14)
>2700-3800	>23.1 (≤1.15)	>19.1 (≤1.25)
>3800-5000	>19.1 (≤1.25)	>18.2 (≤1.28)
>5000-6000	>17.7 (≤1.30)	>16.0 (≤1.38)

COMBINATIONS

Model Name	Connector 1	Connector 2
7M7ML12F-XXXXFFP	7-16 Male	7-16 Male
7M7FL12F-XXXXFFP	7-16 Male	7-16 Female
7M7MRL12F-XXXXFFP	7-16 Male	7-16 Male Right Angle
7M43ML12F-XXXXFFP	7-16 Male	4.3-10 Male
7M43FL12F-XXXXFFP	7-16 Male	4.3-10 Female
7M43MRL12F-XXXXFFP	7-16 Male	4.3-10 Male Right Angle
7MNML12F-XXXXFFP	7-16 Male	N-Male
7MNFL12F-XXXXFFP	7-16 Male	N-Female
7F7FL12F-XXXXFFP	7-16 Female	7-16 Female
7F7MRL12F-XXXXFFP	7-16 Female	7-16 Male Right Angle
7F43ML12F-XXXXFFP	7-16 Female	4.3-10 Male
7F43FL12F-XXXXFFP	7-16 Female	4.3-10 Female
7F43MRL12F-XXXXFFP	7-16 Female	4.3-10 Male Right Angle
7FNML12F-XXXXFFP	7-16 Female	N-Male
7FNFL12F-XXXXFFP	7-16 Female	N-Female
7MR7MRL12F-XXXXFFP	7-16 Male Right Angle	7-16 Male Right Angle
7MR43ML12F-XXXXFFP	7-16 Male Right Angle	4.3-10 Male

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

7MR43FL12F-XXXXFFP	7-16 Male Right Angle	4.3-10 Female
7MR43MRL12F-XXXXFFP	7-16 Male Right Angle	4.3-10 Male Right Angle
7MRNML12F-XXXXFFP	7-16 Male Right Angle	N-Male
7MRNFL12F-XXXXFFP	7-16 Male Right Angle	N-Female
43M43ML12F-XXXXFFP	4.3-10 Male	4.3-10 Male
43M43FL12F-XXXXFFP	4.3-10 Male	4.3-10 Female
43M43MRL12F-XXXXFFP	4.3-10 Male	4.3-10 Male Right Angle
43MNML12F-XXXXFFP	4.3-10 Male	N-Male
43MNFL12F-XXXXFFP	4.3-10 Male	N-Female
43F43FL12F-XXXXFFP	4.3-10 Female	4.3-10 Female
43F43MRL12F-XXXXFFP	4.3-10 Female	4.3-10 Male Right Angle
43FNML12F-XXXXFFP	4.3-10 Female	N-Male
43FNFL12F-XXXXFFP	4.3-10 Female	N-Female
43MR43MRL12F-XXXXFFP	4.3-10 Male Right Angle	4.3-10 Male Right Angle
43MRNML12F-XXXXFFP	4.3-10 Male Right Angle	N-Male
43MRNFL12F-XXXXFFP	4.3-10 Male Right Angle	N-Female
NMNML12F-XXXXFFP	N-Male	N-Male
NMNFL12F-XXXXFFP	N-Male	N-Female
NFNFL12F-XXXXFFP	N-Female	N-Female
43FNXML12F-XXXXFFP	4.3-10 Female	NEX10 Male
43MNXML12F-XXXXFFP	4.3-10 Male	NEX10 Male
43MRNXML12F-XXXXFFP	4.3-10 Male Right Angle	NEX10 Male
7FNXML12F-XXXXFFP	7-16 Female	NEX10 Male
7MNXML12F-XXXXFFP	7-16 Male	NEX10 Male
7MRNXML12F-XXXXFFP	7-16 Male Right Angle	NEX10 Male
NFNXML12F-XXXXFFP	N-Female	NEX10 Male
NMNXML12F-XXXXFFP	N-Male	NEX10 Male
XXXX in the model name is the length; as well for jumper with boots acc. to nomenclature	(Boot examples below)	(Boot examples below)
43MB43MBL12F-XXXXFFP	4.3-10 Male + Boot	4.3-10 Male + Boot
7MB7MBL12F-XXXXFFP	7-16 Male + Boot	7-16 Male + Boot
NMBNMBL12F-XXXXFFP	N-Male + Boot	N-Male + Boot

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

RFS JUMPER MODEL NOMENCLATURE

Connector A	Connector B	Cable Type	Jacket Type		Cable Length	Performance Type
7M	43M	S12	F	-	0100	FFP

7M & 43M CONNECTORS A & B

7M	7-16 Male
7F	7-16 Female
7MR	7-16 Male Right Angle
43M	4.3-10 Male
43F	4.3-10 Female
43MH	4.3-10 Male Handscrew
43MP	4.3-10 Male Push Pull
43MR	4.3-10 Male Right Angle
NM	N-Type Male
NF	N-Type Female
NMR	N-Type Male Right Angle
NXM	NEX10 Male
NXMP	NEX10 Male Push Pull
7MB	7-16 Male with Weatherboots
43MB	4.3-10 Male with Weatherboots
NMB	N-Type Male with Weatherboots

S12 CABLE TYPE

L38	3/8" Low Loss Coax
L12	1/2" Low Loss Coax
S14	1/4" Superflexible Coax
S38	3/8" Superflexible Coax
S12	1/2" Superflexible Coax

F JACKET TYPE

F	JFN Flame Retardant
Blank	PE

0100 CABLE LENGTH*

0100	1 meter
0200	2 meter
0250	2.5 meter
1000	10 meter
1500	15 meter
030	3 feet
060	6 feet
100	10 feet
150	15 feet
200	20 feet

FFP JUMPER PERFORMANCE

FFP	Factory-Fit Premium
FFPB	Factory-Fit Premium; Bird-Proof Option
FFS	Factory-Fit Standard
UPM	Ultra PIM Performance

NOTES:
* 4 digits indicate meter length, 3 digits indicate feet lengt
Others lengths available on request

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

External Document Links
Cable LCF12-50JFN
Handling instruction
Jumper Brochure

Notes

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering