

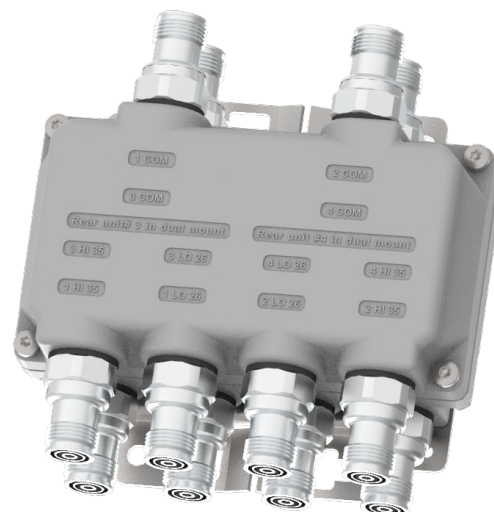
MI-707

DIPLEXER 2300-2690/3400-3800 MHz

The Kaelus MI-707 is a bi-directional Diplexer, designed to combine or split 2300-2690 MHz and 3400-3800 MHz bands. The MI-707 provides low insertion loss and high return loss with excellent passive inter-modulation performance in an extremely small and lightweight IP67 capable package

FEATURES

- Enables antenna & coax sharing for 2300-2690 MHz and 3400-3800 MHz bands systems
- Compact & lightweight - perfect for Small Cell applications
- Low insertion loss & high return loss
- Low passive IM performance
- Single twin and dual twin models available
- 4.3-10 (F) connectors
- Hard Wired and DC Autosense versions available
- Provisions for wall or mast mounting



TECHNICAL SPECIFICATIONS

PORT NAME	2300-2690 MHz	3400-3800 MHz
Passband	2300-2690 MHz	3400-3800 MHz
Insertion loss	< 0.15 dB typical, < 0.2 dB maximum	
Return loss	18 dB minimum	
Maximum input power	100 W (average)	
Intermodulation products	-160 dBc with 2 x 20 W carriers	
Rejection	50 dB minimum in 3400-3800 MHz	50 dB minimum 2300-2690 MHz

ELECTRICAL

Impedance	50 Ω
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DC / AISG

For hardwired versions, DC/AISG can be fully connected (DC all) or a specific connection can be ordered (DC custom). For DC autosense versions, the DC/AISG path is automatically selected. In bottom of the tower applications (combiner mode), each RF channel port is sequentially checked for the presence of DC voltage. If more than one port has voltage, the port that has the highest (programmed) priority is passed to the common port. If a short circuit is detected on the common port DC/AISG is disabled. In top-of-tower applications (splitter mode), DC/AISG is passed to all ports that do not present a short circuit. If a short circuit is detected, the shorted RF port will be disabled for DC/AISG while other RF ports remain connected.

Insertion loss	1 dB max
Return loss	12 dB min
Input voltage range	8 - 30 V DC max 0.3 W
DC current rating	2 A continuous, Drop max 2.4 V
Compliance	3GPP TS 37.461

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

Temperature range	-40 °C to +65 °C -40 °F to +149 °F
Ingress protection	IP67
Lightning protection	5 kA maximum (8/20 us)
MTBF	> 1,000,000 Hours
Compliance	ETSI EN 300 019-1-4 class 4.1E, RoHS

MECHANICAL		
Feature	Single Mount	Dual Mount
Dimensions H x D x W	172 x 97 x 39 mm 6.77 x 3.82 x 1.57 in	172 x 97 x 70 mm 6.77 x 3.82 x 2.76 in
Volume	0.65 l	1.17 l
Weight	1.3 kg 2.87 lb	2.3 kg 5.07
Finish	Painted, NCS 1502-R	
Mounting	Hose clamps or wall mount, supporter pole diameter 40-140mm	

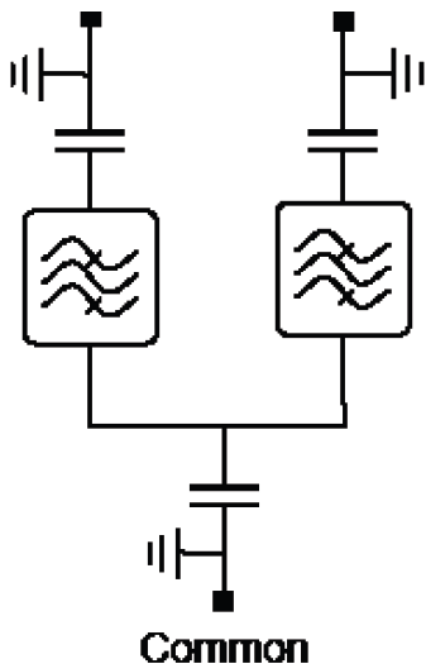
ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
MI-70731	Single twin	BASE MODEL	4.3-10 (F)	DC BLOCK
MI-70732	Single twin	BASE MODEL	4.3-10 (F)	DC TO ALL
MI-70741	Dual twin	BASE MODEL	4.3-10 (F)	DC BLOCK
MI-70742	Dual twin	BASE MODEL	4.3-10 (F)	DC TO ALL
DC / AISG CONFIGURATION				

ELECTRICAL BLOCK DIAGRAM

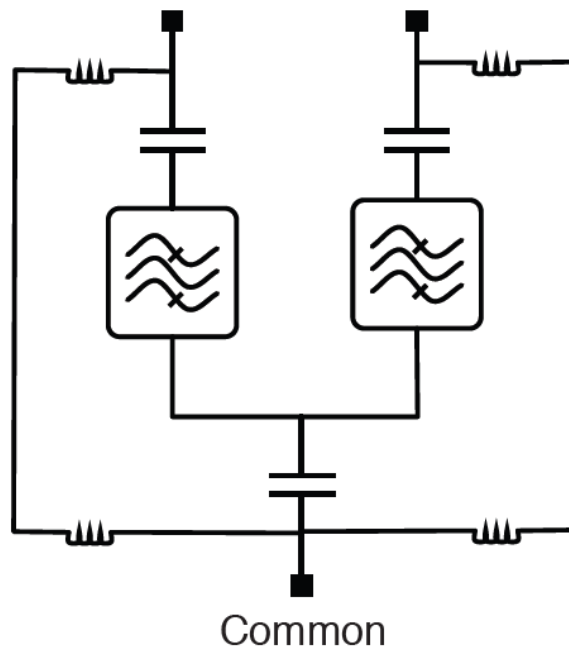
2300-2690

3400-3800



2300-2690

3400-3800



MECHANICAL BLOCK DIAGRAM

