

KA-2023

DIPLEXER 617-960+1695-2690/3300-4200

The Kaelus KA-2023 is a bi-directional Diplexer designed to combine low bands with C-band, the KA-2023 provides excellent insertion loss and passive intermodulation performance.

FEATURES

- Enables antenna/feeder to inject C-band into existing installations
- Designed and 100% tested for low passive intermodulation
- Very low insertion loss
- Small size, lightweight



TECHNICAL SPECIFICATIONS

PORT NAME	LOW BAND	HIGH BAND
Passband	617-960/1695-2200 MHz	3300 - 4200MHz
Insertion loss	617- 960MHz: 0.3dB typical, 0.4dB max 1695 - 2200MHz: 0.2dB typical, 0.3dB max	0.2dB typical, 0.3dB max
Return loss	20dB typical 18dB min	
Maximum input power	100W (average) / 1000W (PEP)	100W (average) / 1000W (PEP)
Intermodulation products	<-160 dBc typ at 2 x +43dBm TX Carrier (IM3)	<-153 dBc typ at 2 x +43dBm TX Carrier (IM3)

ELECTRICAL

Isolation	40dB minimum 3300-4200 MHz	40dB minimum 617-960 MHz 1695-2690 MHz
Impedance	50Ohms	

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
Altitude	3000m/10,000ft maximum
Lightning protection	RF: ±5kA maximum (8/20us), IEC61312-1
MTBF	>1,000,000 hours
Compliance	FCC part 15 subpart B

MECHANICAL

Dimensions H x D x W (single unit)	170 x 51 x 153 mm 6.9 x 2.0 x 6.0 in
Dimensions H x D x W (twin unit)	170 x 94 x 153 mm 6.9 x 3.7 x 6.0 in
Dimensions H x D x W (quad unit)	170 x 191 x 153 mm 6.9 x 7.5 x 6.0 in
Weight	2.2 kg 4.7 lbs (single unit) 3.9 kg 8.6 lbs (twin unit) 7.8 kg 17.1 lbs (quad unit)
Finish	Painted, NCS 1502-R
Connectors	4.3-10 Female
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
KA-2023-1031	2 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-2023-1033	2 in / 1 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON
KA-2023-2031	4 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-2023-2033	4 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON
KA-2023-4031	8 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
KA-2023-4033	8 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC LOW TO COMMON

ELECTRICAL BLOCK DIAGRAM

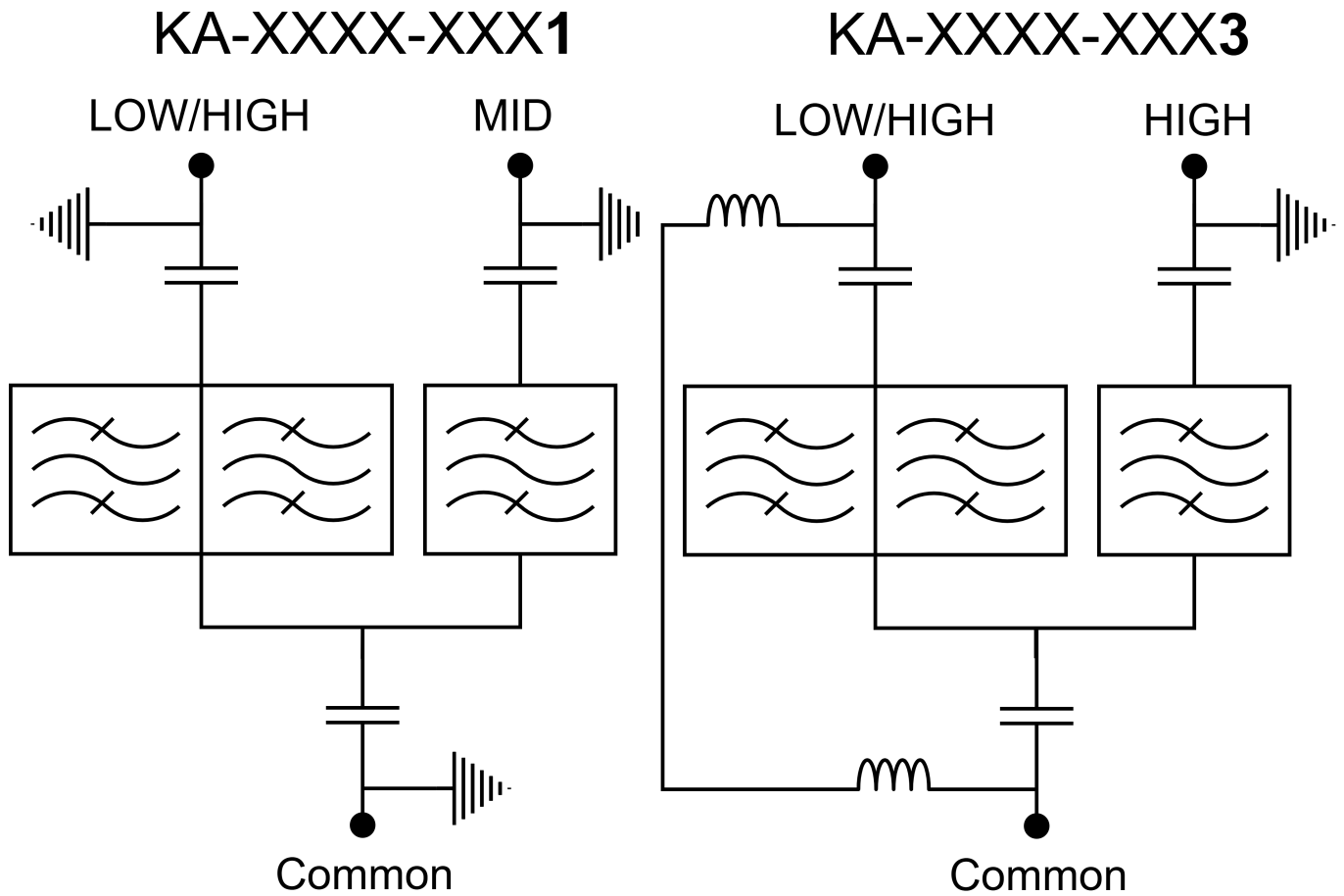
KA-2023-XXXZ where

Z denotes the DC path variant

LOW port is 617-960/1695-2690 MHz

HIGH port is 3300-4200 MHz

Please note if DC ALL is used that all ports which are DC shorted need to have a DC block



MECHANICAL BLOCK DIAGRAM

