

DBC0157F1V13-2

DIPLEXER 700/850-900

The Kaelus DBC0157 is a bi-directional diplexer designed to combine 700 and 850-900 technologies. The DBC0157 provides low insertion loss and excellent passive intermodulation performance. The DBC0157 can be used at either the BTS or antenna end of the feeder.

FEATURES

- Enables antenna/feeder sharing for 700 and 850-900 networks
- Low insertion loss & high return loss
- Low passive IM performance
- Multiple DC/AISG bypass configurations available with built-in lightning protection
- Single and twin models available



TECHNICAL SPECIFICATIONS

PORT NAME	700	850-900
Passband	698 - 806MHz	824 - 960MHz
Insertion loss	0.35dB typical	
Return loss	18dB minimum	
Maximum input power	250W (average)	250W (average)
Intermodulation products	-160 dBc maximum with 2 x +43dBm TX Carrier	
Isolation in 700 band	N/A	50dB minimum
Isolation in 850-900 band	50dB minimum	N/A

ELECTRICAL

Impedance	50Ohms
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DC / AISG

DC/AISG path is factory configurable, see ordering information

Passband	0 – 3MHz
Insertion loss	1dB maximum
Return loss	12dB minimum
Input voltage range	± 30V
DC current rating	3A continuous
Compliance	3GPP TS 25.461

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	RF: ±5kA maximum (8/20us)
MTBF	>1,000,000 hours
Compliance	ETS 300 019-1-4 Class 4.1E

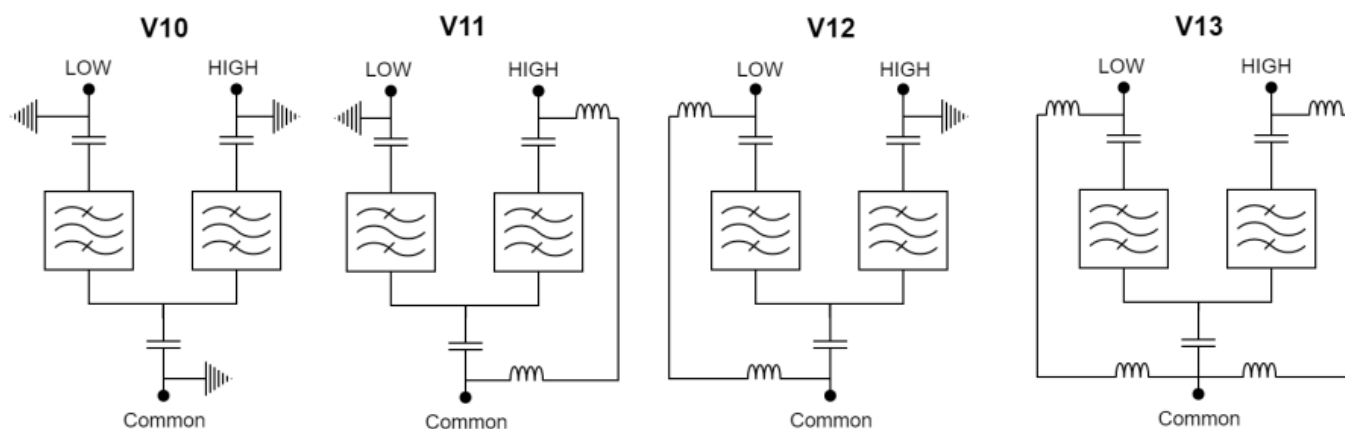
MECHANICAL	
Dimensions H x D x W (single unit)	159 x 174 x 62mm 6.25 x 6.85 x 2.44in
Dimensions H x D x W (twin unit)	159 x 174 x 131 mm 6.25 x 6.85 x 5.15in
Weight	2.6kg 5.73lbs (single unit) 4.3kg / 9.47lbs (twin unit)
Finish	NCS 1502-R (light grey)
Connectors	4.3-10 (F) x 3 long neck (single unit) 4.3-10 (F) x 6 long neck (twin unit)
Mounting	Pole/wall bracket supplied with two metal clamps for 40-140 mm diameter poles

ORDERING INFORMATION

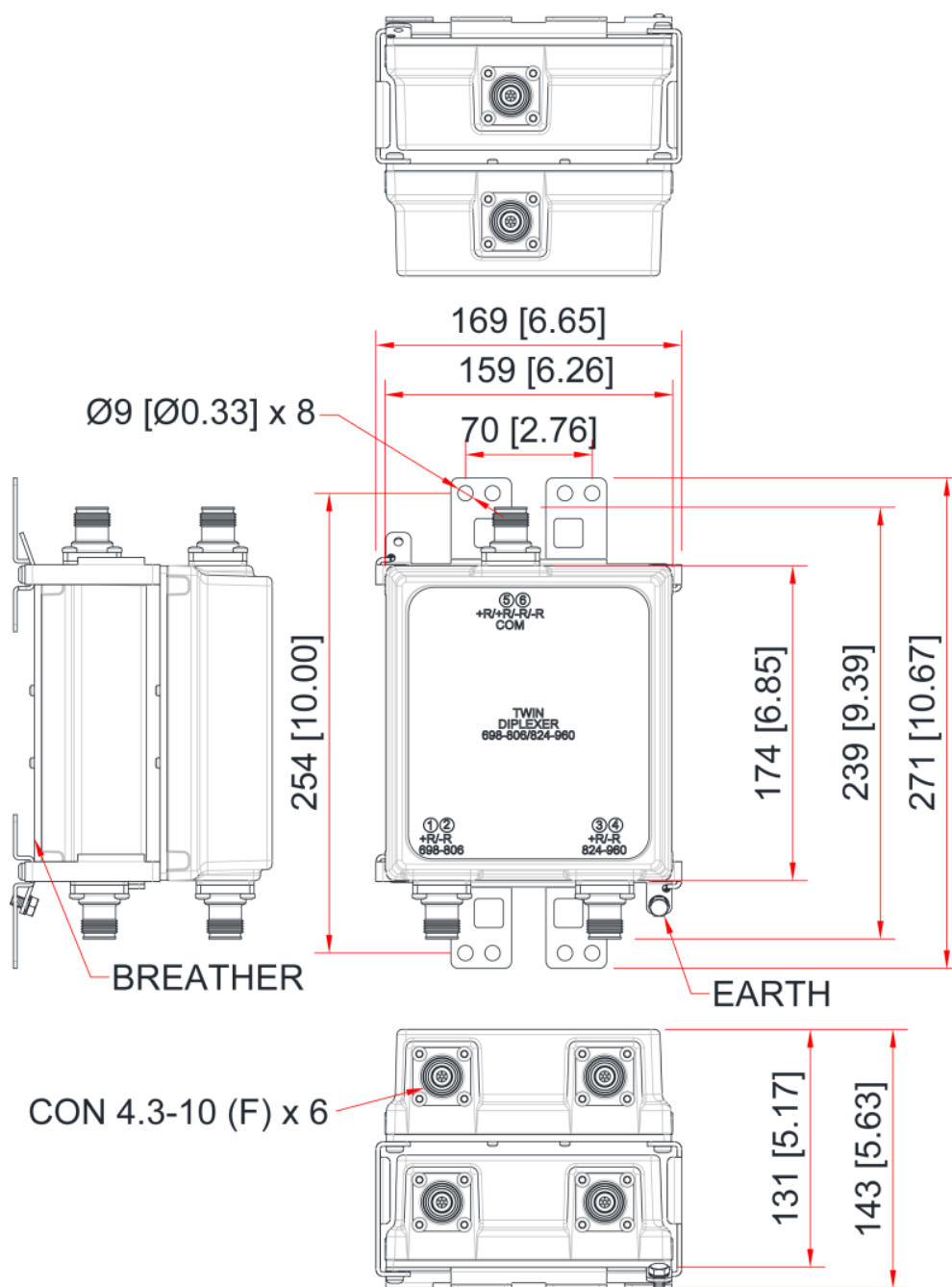
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS	DC/AISG CONFIGURATION
DBC0157F1V10-1	1 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
DBC0157F1V10-2	2 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
DBC0157F1V11-1	1 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC ON 850-900
DBC0157F1V11-2	2 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC ON 850-900
DBC0157F1V12-1	1 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC ON 700
DBC0157F1V12-2	2 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC ON 700
DBC0157F1V13-1	1 in / 2 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL PATH
DBC0157F1V13-2	2 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL PATH
Note: DC autosense versions available, contact Kaelus for information				

ELECTRICAL BLOCK DIAGRAM

DBC0157F1VXX-Z where
 XX denotes the DC path variant
 Z denotes the mounting : "-1" = single mount and "-2" = dual mount
LOW port is 700 band
HIGH port is 850-900 band



MECHANICAL BLOCK DIAGRAM



**DBC0157F1VXX-2
DUAL MOUNT**