

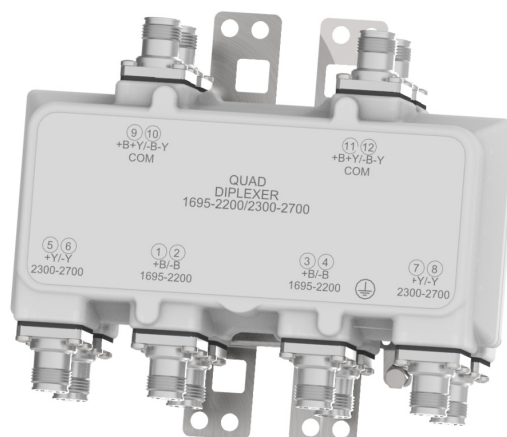
DBCT156F1V13-1

DIPLEXER 1800-2100/2300-2600

The Kaelus DBCT156 is a bi-directional Diplexer designed to combine 1800-2100 and 2300-2600 technologies. The DBCT156 provides low insertion loss and excellent passive intermodulation performance. The DBCT156 can be used at either the BTS or antenna end of the feeder.

FEATURES

- Enables antenna/feeder sharing for 1800-2100 and 2300-2600 networks
- Low insertion loss & high return loss
- Low passive IM performance
- Multiple DC/AISG bypass configurations available with built-in lightning protection
- Twin (2x2 MIMO) and quad (4x4 MIMO) models available



TECHNICAL SPECIFICATIONS

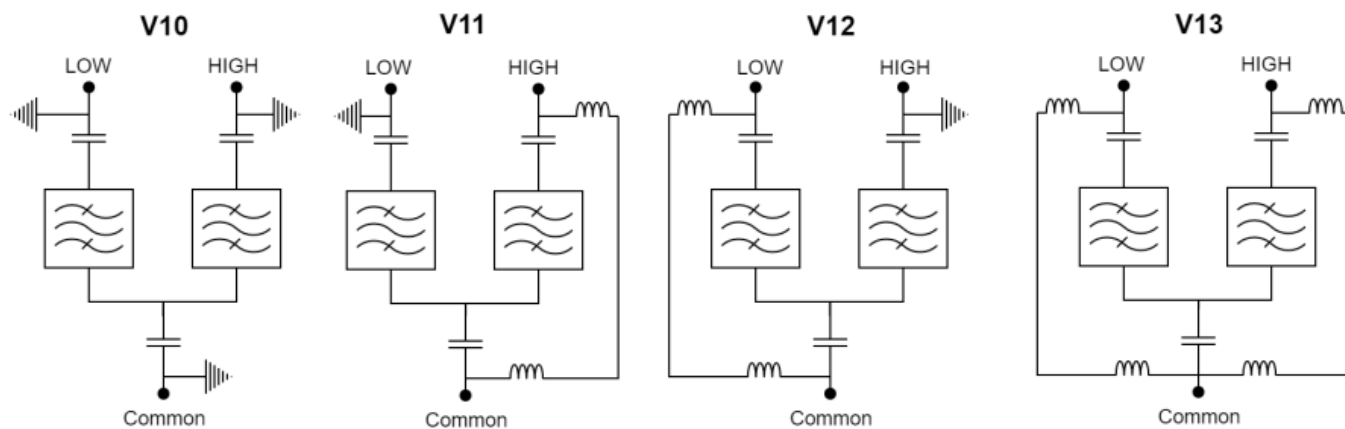
PORT NAME	1800-2100	2300-2600
Passband	1695 - 2200MHz	2300 - 2700MHz
Insertion loss	0.2dB typical	
Return loss	18dB minimum	
Maximum input power	250W (average)	250W (average)
Intermodulation products	-160 dBc maximum with 2 x +43dBm TX Carrier	
Isolation in 1800-2100 band	N/A	50dB minimum
Isolation in 2300-2600 band	50dB minimum	N/A
ELECTRICAL		
Impedance	50Ohms	
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 (twin unit)	110 x 49 x 239 mm 4.33 x 1.92 x 9.41 in	
Dimensions H x D x W (quad unit)	110 x 89 x 239 mm 4.33 x 3.51 x 9.41 in	
Weight	2.6kg / 5.73lbs (Twin) 4.4kg / 9.70lbs (Quad)	
Finish	NCS 1502-R (light grey)	
Connectors	4.3-10 (F) x 6 long neck (Twin) 4.3-10 (F) x 12 long neck (Quad)	
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
DBC0156F1V10-1	2 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
DBCT156F1V10-1	4 in / 8 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	NO DC
DBC0156F1V11-1	2 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO 2300-2600
DBCT156F1V11-1	4 in / 8 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO 2300-2600
DBC0156F1V12-1	2 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO 1800-2100
DBCT156F1V12-1	4 in / 8 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO 1800-2100
DBC0156F1V13-1	2 in / 4 out	FIXED DC FACTORY CONFIGURABLE	4.3-10 (F)	DC TO ALL PATH
DBCT156F1V13-1	4 in / 8 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

DBC0156F1VXX-Z and DBCT156F1VXX-Z where
 XX denotes the DC path variant
 Z denotes the mounting : "-1" = single mount and "-2" = dual mount
 LOW port is 1800-2100 band
 HIGH port is 2300-2600 band



MECHANICAL BLOCK DIAGRAM

