

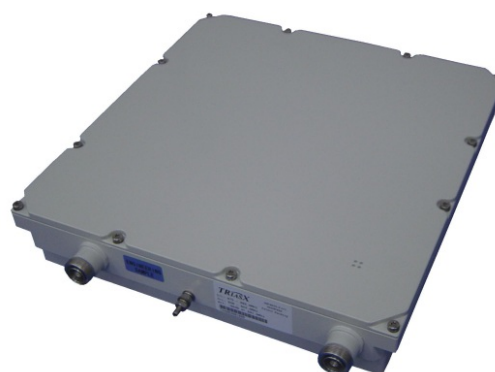
DDF0035F1V1-1

DUAL DUPLEX FILTER 850

Designed as an 850MHz transmit cleanup filter, the Kaelus DDF0035 is used to attenuate spurious from a wideband CDMA base station and reduce its effects on a nearby 900MHz frequency allocation.

FEATURES

- For use with WCDMA850 node-B with co-located GSM900 systems
- For indoor or outdoor use
- Covers FA01, FA02 and FA03 channels, 86 dB rejection, ceramic technology
- Provides rejection of microwave link frequencies near 850 uplink band
- Internal DC/AISG bypass path



TECHNICAL SPECIFICATIONS

DOWNLINK (BTS TX)	
Passband	875 - 889.6MHz
Insertion loss	1.3dB maximum, 0.8dB typical band edge 0.5dB typical at mid-band
Return loss	18dB minimum
EVM	(Across 3.84MHz) 8% maximum / 6% typical (CH FA01), 8% maximum / 6% typical (CH FA02), 8% maximum / 2.6% typical (CH FA03),
Group delay variation	(Across 3.84MHz) 250ns maximum / 150ns typical (CH FA01, CF 887.2MHz), 100ns maximum / 70ns typical (CH FA02, CF 882.2MHz), 100ns maximum / 30ns typical (CH FA03, CF 877.4 MHz) Across passband= 700ns maximum / 820ns typical
Absolute group delay	800ns maximum / 670ns typical
Maximum input power	2 x 160W WCDMA carriers (32DCPH)
UPLINK (BTS RX)	
Passband	830 - 844.6MHz
Insertion loss	1.0dB maximum, 0.85dB typical at band edge 0.5dB typical at mid-band
Return loss	18dB
Group delay variation	(Across 3.84 MHz) 50ns maximum / 20ns typical (CH FA03 and FA02), 100ns maximum / 70ns typical (CH FA01) Across passband= 200ns maximum / 100ns typical
Absolute group delay	500ns maximum / 200ns typical
ATTENUATION	
891.6 - 898.3MHz	86dB minimum
847 - 852MHz	20dB minimum
ELECTRICAL	
Impedance	50ohms
Intermodulation products	<-150dBc with 2 x 43dBm carriers, reflected mode
DC / AISG	
Passband	DC - 3MHz
Insertion loss	1dB maximum
Return loss	12dB minimum
Input voltage range	+/- 33V maximum, 2 Amp

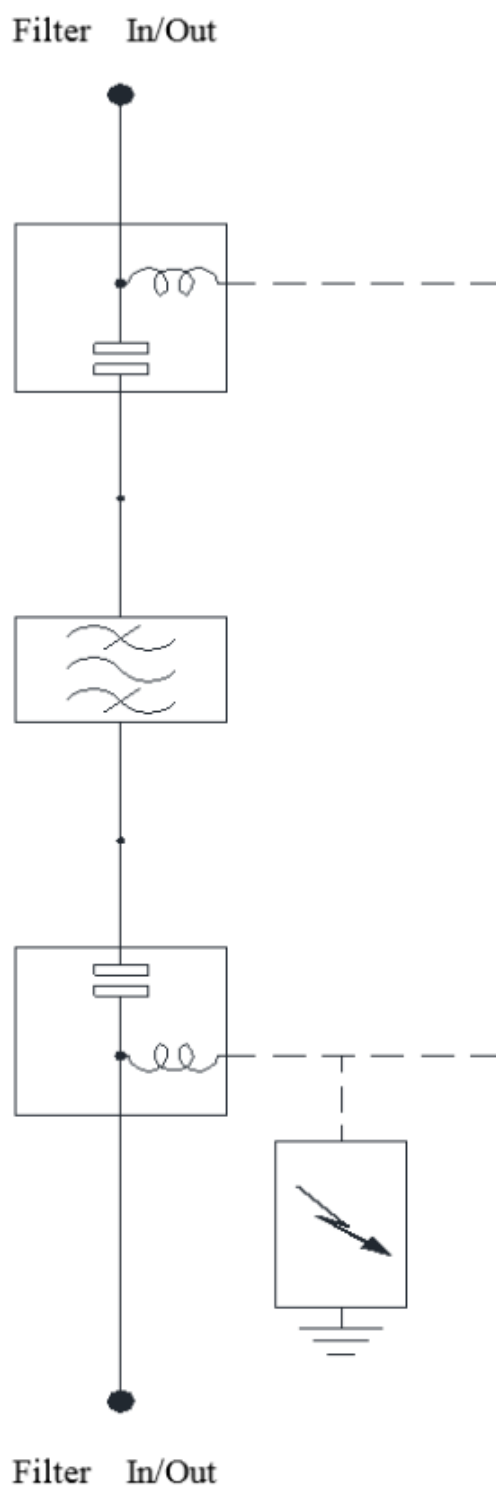
ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-20°C to +60°C 4°F to +140°F
Altitude	2000m 6,560ft maximum
Lightning protection	Gas arrestor fitted to DC bypass path. M6 earth stud fitted to connector face.

MECHANICAL	
Dimensions H x D x W	400 x 380 x 80mm 15.75 x 14.96 x 3.15in
Weight	17kg 34.48lbs
Finish	Powder coated, light grey (RAL7035)
Connectors	DIN 7-16 (F) x 2
Mounting	Pole/wall bracket supplied with two metal clamps for 45-178 mm diameter poles

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
DDF0035F1V1	Dual Duplex Filter, 830-844.6/875-889.6, rejection 86dB@891.6MHz, outdoor
DDF0035F1V2	Dual Duplex Filter, 830-844.6/875-889.6, rejection 86dB@891.6MHz, outdoor

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM

