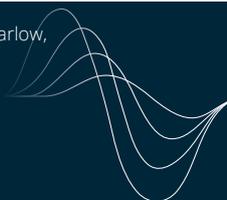
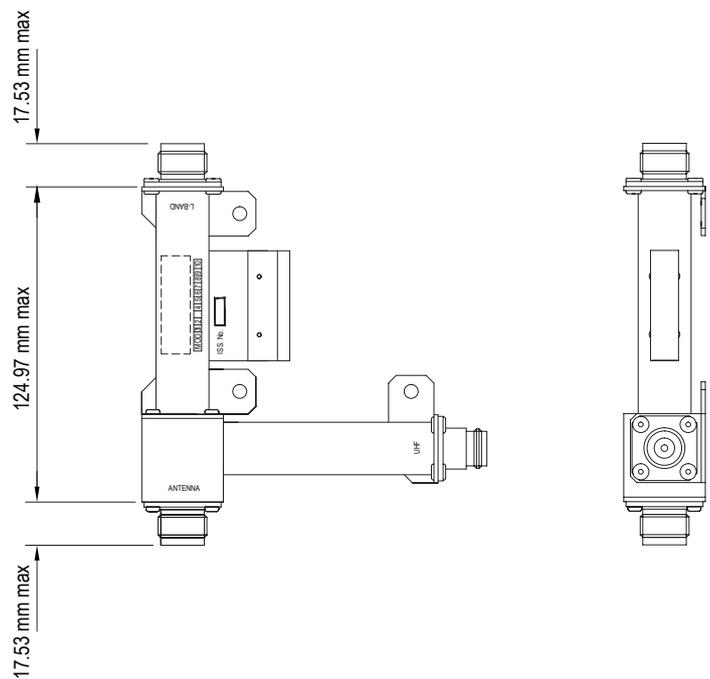
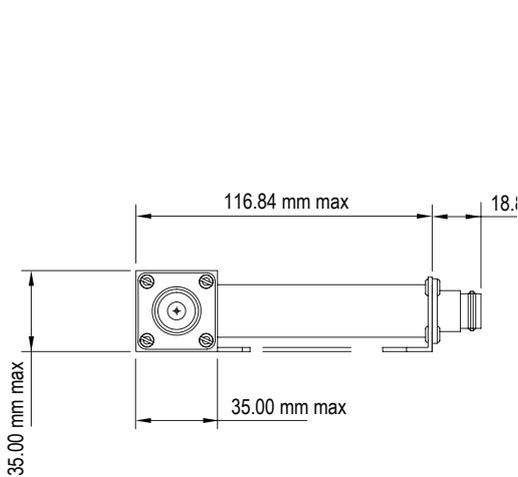


VHF/UHF/L-Band Diplexer

The 7-54 VHF/UHF/L-Band diplexer is one of a range of devices that are intended for use in general airborne applications.

The diplexer accepts the signals from a single 30 MHz to 1220 MHz source, and provides separate isolated 30 MHz to 400 MHz and 960 MHz to 1220 MHz outputs.

The **7-54** is constructed as discrete component filters housed within a tubular metal case. The end faces are closed with the RF connectors.



VHF/UHF/L-Band Diplexer

ELECTRICAL

Frequency	30 MHz - 400 MHz 960 MHz - 1220 MHz
Gain	< 1.25:1 30 MHz-400 MHz < 1.4:1 960 MHz-1220 MHz < 1.2:1 1025 MHz-1235 MHz < 1.2:1 1085 MHz-1095 MHz
Insertion Loss	< 0.5 dB (both bands)
Impedance	50 ohm nominal
Isolation	> 85 dB (UHF to L-Band both bands)
Power Rating	100 W cw (maximum)30 MHz-400 MHz2 kW peak 0.04% duty cycle960 MHz-1220 MHz
Connectors	N Type Female

MECHANICAL

Dimensions (deployed)	116.84 mm x 124.97 mm x 35.51 mm (not including connectors)
Weight	0.49 kg max

ENVIRONMENTAL

Temperature/Altitude	BS3G100, Part 2, Section 3:3.2, Grade V.1 modified
Ground Operation Long Term:	54°Cto+85°C
Ground Operation Short Term:	-54°Cto+85°C
Storage:	-54°Cto+85°C
High Temperature Flight:	+135°C for 1 hour +150°C at 21336 m for 5 min
Low Temperature	MIL-STD-810C, Method 502.1
Vibration	BS3G100, Part 2, Section 3:3.1, Category 5
Acceleration	BS3G100, Part 2, Section 3:3.6 Table 1, Class 1A(i), Grade C 17g Table 2, Class 12, Grade 11G
Contamination	BS3G100, Part 2, Section 3:3.12, Class A D, Eng RD 2486, 2487, 2494, 2498 DTD 585 Kilfrost WWF2 Engine Wash WD40
Salt Mist	BS3G100, Part 2, Section 3:3.8, Severity 2
Waterproofness	MIL-STD-810C, Method 507.1
Mould Growth	BS3G100, Part 2, Section 3:3.3

