

## Diplexer

The 7-377 diplexer operates over the frequency ranges of 30 MHz to 174 MHz and 225 MHz to 410 MHz.

The diplexer comprises a low pass and a high pass filter connected in parallel at the input terminal. The electrical assembly is housed in a machined, aluminium alloy box, enclosed by an aluminium alloy baseplate. Three mounting holes provide for attachment to the mounting surface.



### ELECTRICAL

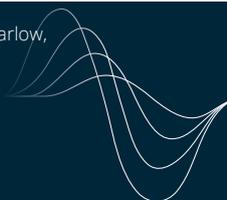
<b>Frequency</b>	30 MHz - 174 MHz		
	225 MHz - 410 MHz		
<b>Power Rating</b>	100 W CW (maximum)		
<b>Impedance</b>	50 ohm (nominal)		
<b>VSWR</b>	≤ 1.5:1		
<b>Insertion Loss</b>	≤ 1 dB	30 MHz	- 162 MHz
	≤ 1.25 dB	162.1 MHz	- 174 MHz
	≤ 1 dB	225 MHz	- 410 MHz
<b>Isolation</b>	≥ 65 dB	30 MHz	- 162 MHz
	≥ 50 dB	162.1 MHz	- 174 MHz
	≥ 50 dB	225 MHz	- 240 MHz
	≥ 65 dB	240.1 MHz	- 410 MHz
<b>Connectors</b>	I/P: N Type Female		
	VHF O/P: TNC Female		
	UHF O/P: N Type Female		

### MECHANICAL

<b>Dimensions</b>	160.5 mm x 78.0 mm x 25.0 mm (maximum)
<b>Weight</b>	0.5 kg (maximum)
<b>Mounting</b>	3 holes fixed location

### ENVIRONMENTAL

<b>Temperature and Altitude</b>	RTCA DO-160C, Section 4, Category C2
	Operational: -55°C to +70°C
	Storage: -55°C to +85°C
	Altitude: 10668 m
<b>Temperature Variation</b>	RTCA DO-160C, Section 5, Category B
<b>Humidity</b>	RTCA DO-160C, Section 6, Category B
<b>Shock</b>	RTCA DO-160C, Section 7, Category B
	Operational: Para 7.2.1 (6g)
	Crash Safety (Impulse): Para 7.3.1 (15g)
	Crash Safety (Sustained): Para 7.3.2 (12g)
<b>Vibration</b>	RTCA DO-160C, Section 8, Categories N and V
<b>Explosion Proofness</b>	RTCA DO-160C, Section 9, Category X
<b>Waterproofness</b>	RTCA DO-160C, Section 10, Category W
<b>Fluids Susceptibility</b>	RTCA DO-160C, Section 11, Category F
<b>Sand and Dust</b>	RTCA DO-160C, Section 12, Category D
<b>Fungus Resistance</b>	RTCA DO-160C, Section 13, Category F
<b>Salt Spray</b>	RTCA DO-160C, Section 14, Category X
<b>Magnetic Effect</b>	RTCA DO-160C, Section 15, Class Z
	Less than 0.3 m



# 3-377

# CHELTON

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