



3.5~3.8MHz SUPER COMPACT DIPOLE

11.9m Long StealthTypeElement

CD78Jr



The CD78Jr is an ultra reduce scaled, 2-band dipole antenna for both 3.5MHz and 3.8MHz bands. The entire length of antenna element is 11.9m long which is 28~30% reduce scaled of mechanical length of full-sized antenna. In order to enhance electrical performance better, Hi-Q refurbished high power capable loading coil and a stealth type of capacity-hat are suitably used comparatively, which make it possible to assure approximately -2dB of radiational efficiency against full-scaled length that is considered to be incomparable against a full-sized dipole antenna. In the feed section, a 5-channel matching coupler model BS81, consists of matching coil, relay and high power capable balan transformer is used which enables to derive a low VSWR and high RF power radiational efficiency. This controller for channel swichting is provided standard as an assembly kit. A 12VDC power supply and 7 conductors control cable are required for this channel switching.

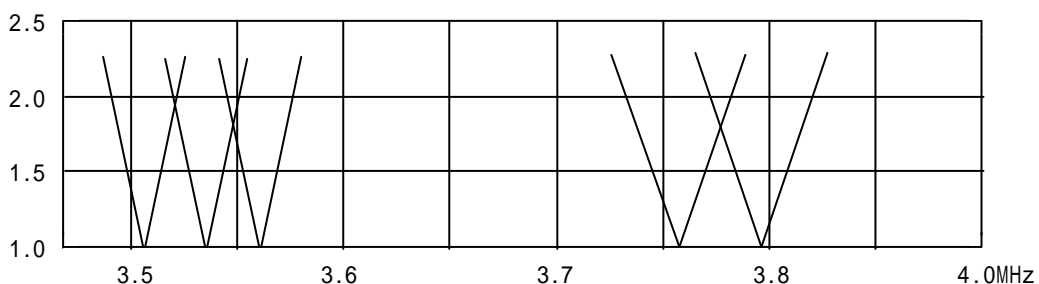
The VSWR of CD78 is less than 2:1 and allowable bandwidth per channel is approximately 35kHz for both 3.5 and 3.8MHz. Mechanically, a much attention to the selected materials and structural design has also been taken into consideration in this CD78. In couple with a selected high tension aluminum materials, swage-processed tubing are used for element tubings in order to reduce an unnecessary weight and wind surface area.

Frequency	3.50, 3.52, 3.56, 3.75, 3.8 MHz	
Gain	0 dBi	
Impedance	50	
VSWR At Resonance	Less Than 1.3	
Power Capability CW/SSB	3.5MHz	0.6/1.2 kW
	3.75MHz	0.8/1.6 kW
	3.5MHz	1.0/2.0 kW
Element Length	Approx. 11.9m	
Weight	Element: 6 kg	
	Coupler: 1 kg	
Mast Diameter	48 ~ 61 mm	
Wind Load Capability	35m/s	



5-Channel Coupler

VSWR



VSWR Curve, CD78Jr