

# RCT4-WBC-1X-AXA



RCT4, RADIAX® Coaxial Radiating Cable, 50–3500 MHz, foil, 1/2 in, black PE jacket

## OBSOLETE

This product was discontinued on: February 29, 2012

### Replaced By:

RCT4-WBC-1X-RNA

RCT4, RADIAX® Coaxial Radiating Cable with Bump, 50–3800 MHz, foil, 1/2 in, black non-halogenated, fire retardant polyolefin jacket

## Product Classification

<b>Product Type</b>	Radiating cable
<b>Product Brand</b>	RADIAX®
<b>Product Series</b>	RCT4

## General Specifications

<b>Polarization</b>	Vertical
<b>Cable Type</b>	Coupled Mode Series
<b>Jacket Color</b>	Black

## Dimensions

<b>Inner Conductor OD</b>	4.826 mm   0.19 in
<b>Outer Conductor OD</b>	12.954 mm   0.51 in
<b>Nominal Size</b>	1/2 in
<b>Recommended Distance from the Wall</b>	50.8 mm   2 in
<b>Recommended Hanger Spacing</b>	1 m   3.281 ft

## Electrical Specifications

<b>Attenuation Test Method</b>	IEC 61196-4
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# RCT4-WBC-1X-AXA

<b>Attenuation Tolerance</b>	±5%
<b>Cable Impedance</b>	50 ohm ±3 ohm
<b>dc Resistance, Inner Conductor</b>	1.48 ohms/km   0.451 ohms/kft
<b>dc Resistance, Outer Conductor</b>	5.305 ohms/km   1.617 ohms/kft
<b>dc Test Voltage</b>	4000 V
<b>Insulation Resistance</b>	100000 MOhms-km
<b>Jacket Spark Test Voltage (rms)</b>	8000 V
<b>Operating Frequency Band</b>	50 – 3500 MHz
<b>Peak Power</b>	40 kW
<b>Velocity</b>	88 %
<b>VSWR Installed, typical, 1700–2700 MHz</b>	1.38
<b>VSWR Installed, typical, 50–960 MHz</b>	1.3
<b>VSWR on Reel, typical</b>	1.43

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Coupling Loss 50%	Coupling Loss 95%
75.0	1.8	0.54	59	67
100.0	2.1	0.64	52	63
150.0	2.6	0.79	61	71
350.0	3.9	1.19	72	83
450.0	4.4	1.34	74	84
800.0	6	1.82	73	84
900.0	6.4	1.95	73	85
960.0	6.6	2.01	73	85
1700.0	9.3	2.83	70	81
1800.0	9.5	2.9	69	80
1900.0	9.8	2.98	71	82
2000.0	10.2	3.1	69	81
2100.0	10.6	3.23	72	84
2200.0	11	3.35	70	82
2300.0	11.5	3.5	64	75
2400.0	11.6	3.53	66	77
2500.0	12	3.65	66	77
2600.0	12.2	3.7	68	79

# RCT4-WBC-1X-AXA

<b>2700.0</b>	12.7	3.87	67	78
<b>2800.0</b>	13.1	3.99	67	78
<b>3300.0</b>	15.8	4.82	70	80
<b>3400.0</b>	15.9	4.85	70	80
<b>3500.0</b>	16.3	4.97	70	80

## Material Specifications

<b>Dielectric Material</b>	Foam PE
<b>Jacket Material</b>	PE
<b>Inner Conductor Material</b>	Copper-clad aluminum wire
<b>Outer Conductor Material</b>	Copper foil

## Mechanical Specifications

<b>Minimum Bend Radius, single Bend</b>	127 mm   5 in
<b>Tensile Strength</b>	45 kg   99.208 lb
<b>Bending Moment</b>	3.7 N-m   32.748 in lb
<b>Coupling Loss Test Method</b>	IEC 61196-4
<b>Coupling Loss Tolerance</b>	±10 dB
<b>Flat Plate Crush Strength</b>	0.7 kg/mm   39.198 lb/in
<b>Indication of Slot Alignment</b>	No cable/slot orientation needed

## Environmental Specifications

<b>Installation temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-70 °C to +85 °C (-94 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	68 °F   20 °C
<b>Average Power, Ambient Temperature</b>	104 °F   40 °C
<b>Average Power, Inner Conductor Temperature</b>	212 °F   100 °C
<b>Toxicity Index Test Method</b>	IEC 60754-1   IEC 60754-2

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

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