

Positive Train Control (PTC) Filter, Railroad RF Band Pass, 220 MHz to 222 MHz, Type N F/F, 20W CW, IP54



RRF-ITC-220-NFF

Features

- Max Power 20W
- Frequency Range from 220 MHz to 222 MHz
- N-Type Female connectors
- Waterproof IP54 rated
- VSWR Typical 1.5:1

Description

RF band pass filter RRF-ITC-220-NFF from PolyPhaser, is a combline filter with high rejection. This RF filter is manufactured in a coaxial in-line design with a specific operating frequency range. All PolyPhaser RF surge protector products are available in stock with same day shipping.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Passband Frequency	220		222	MHz
Impedance		50		Ohms
Insertion Loss			2.5	dB
Passband VSWR		1.5:1		
Passband Return Loss		14		dB
Rejection at 160 MHz	58	40		dB
Rejection at 450 MHz	58	40		dB
Input Power, CW			20	Watts

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Size

Length	8.66 in [219.96 mm]
Width	5.91 in [150.11 mm]
Height	3.82 in [97.03 mm]
Weight	11.25 lbs [5.1 Kg]

Configuration

Design	Comblin
Number of Sections	
Connector 1	N Female
Connector 2	N Female

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[Positive Train Control \(PTC\) Filter, Railroad RF Band Pass, 220 MHz to 222 MHz, Type N F/F, 20W CW, IP54 RRF-ITC-220-NFF](#)

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Environmental Specifications

Temperature

Operating Range -40 to +70 deg C

Environment

Ingress Protection (IP) Rating IP54
Humidity 40% to 95%, Non-condensing
Vibration 5 to 10 Hz = 7.6mm
10 to 200 Hz = 1.5 G
Mech shock - 10 G

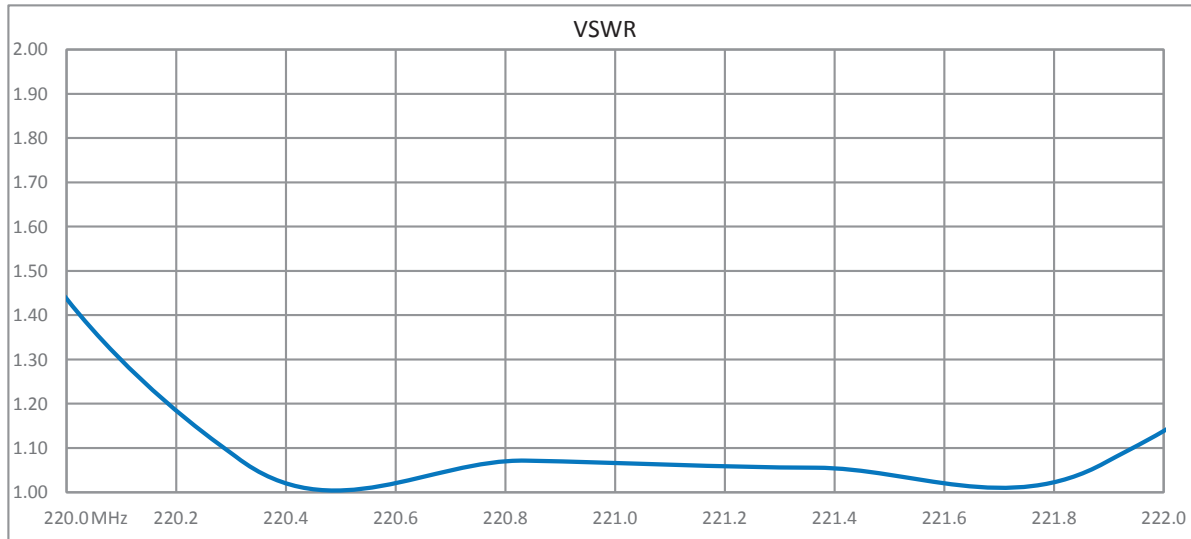
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Typical Performance Data



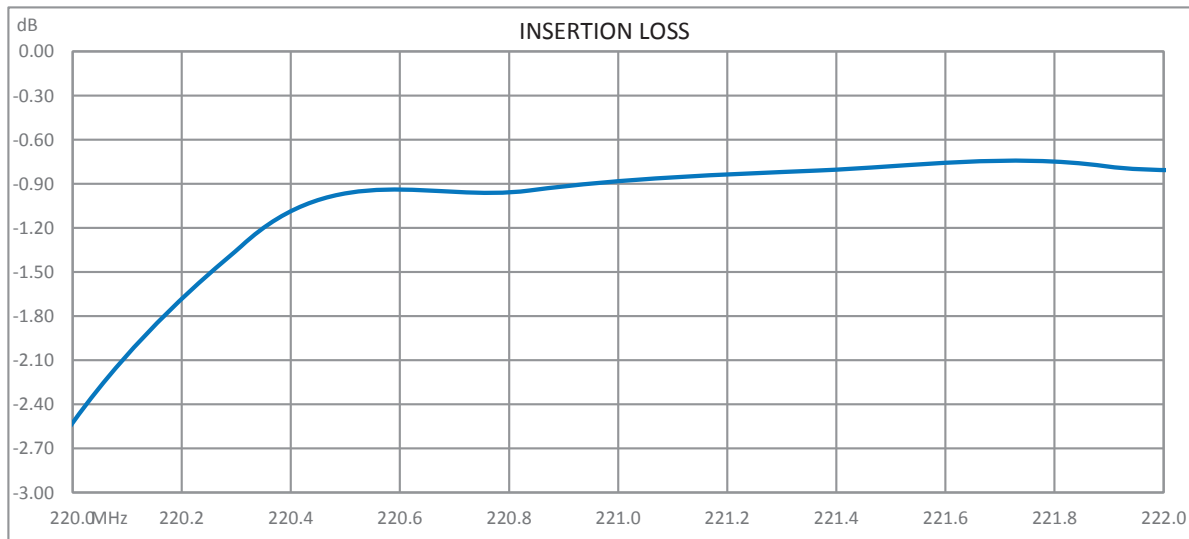
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PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service and expert technical support PolyPhaser continually expands its product offering and services to serve engineers' urgent needs for RF components in mission critical communication networks.

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URL: <https://www.polyphaser.com/railroad-band-pass-220-222-mhz-rrf-itc-220-nff>

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RRF-ITC-220-NFF CAD Drawing

