

## Positive Train Control (PTC) Filter, Railroad RF Band Pass with Surge Protection, 450 MHz to 470 MHz, 25W, IP67 with Type N Female Connectors

NexTek's BPF series band pass filters are specifically designed for railroad positive train control, PTC networks. They provide optimum filtering; sharp cutoff and notched response. The filters reduce the interference from co-located radios, internal (on-board) and external to increase the system's reliability. NexTek's solution for the PTC filter incorporates a bandpass of 450 – 470 MHz frequencies while incorporating surge protection utilizing Type N Connectors.

For additional information please contact NexTek directly or your local representative.

### Key Features

- Frequency Range 450 MHz to 470 MHz
- Continuous RF Power 25W
- VSWR 1.22:1 typical
- Surge Current 10kA
- Weatherproof IP67 Rated
- Type N Female Connectors



## Electrical Specifications

RF Performance	
Passband Frequency Range	450 – 470 MHz
Passband Return Loss	≥ 20 dB
VSWR, Typical	1.22:1
Passband Insertion Loss	≤ 1 dB (0.8 dB typical)
Band Reject Insertion Loss	≥60 dB @ 220 MHz ≥60 dB @ 800 MHz

Surge Protection Performance	
Surge Current	10kA IEC 61000-4-5 8uS/20uS WAVEFORM
GDT Turn on	90 Volts ±20%
Throughput Energy For 3kA @8/20µs surge	<50 µJ <500mV/pk Voltage

Continuous RF Power	25W
---------------------	-----

## Mechanical Specifications

Size	
Length	2.25 in (57.2mm)
Width	7.00 in (177.8mm)
Height	1.1 in (28.1 mm)
Weight	1 lb. (453.6g)

Configuration	
Design	Lumped Elements
Connector 1	N Female
Connector 2	N Female

## Environmental Specifications

Temperature Range	-40°C to +85°C
Weatherization	IEC 60529 IP67 and meets BELLCORE #TA-NWT-000487 PROCEDURE 4.11 WIND DRIVEN 120MPH RAIN INTRUSION TEST

## Regulatory Compliance:

RoHS	Yes
REACH	Yes

## Accessories: Hardware Kit Included

4 each	Screw, 10-32 x ½" Phil Pan Head 18-8 SS
4 each	Washer, Lock EXT Tooth # 10 18-8 SS
4 each	Nut, 10-32 Hex 18-8 SS

### Mechanical Outline

