

DATA SHEET

# VHF/UHF Duplexer

## Applications

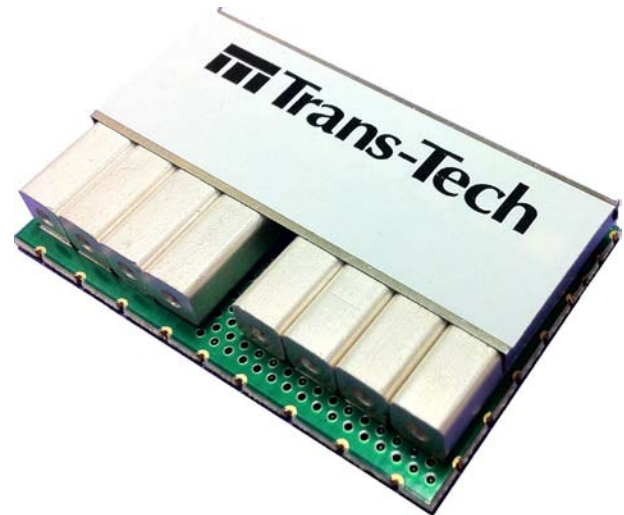
- Electronic warfare
- Portable transceivers for both military and homeland security radio communications

## Features

- Low insertion loss
- SMT or connectorized (as shown) designs
- Frequency range from VHF to 2 GHz
- Superior power handling, with up to 50 W CW
- Wide operating temperature range
- Light weight
- Smaller profile compared to a typical cavity design
- Easy drop-in solution
- Quick turnaround on new designs
- Reconfigurable for many different connector types
- RoHS-compliant
- Available in various frequencies (contact TTI for more information)

## Description

Trans-Tech, Inc. (TTI) announces a new family of VHF/UHF duplexer filters that are available in both connectorized and Surface Mount Technology (SMT) designs.



TTI has the capability to design and manufacture filters from VHF up to 2 GHz, with higher power handling ability up to 50 W, Continuous Wave (CW). TTI offers rapid response times on all filter design requirements.

The high-power ceramic filter designs from TTI offer customers the option to go with a lighter weight, reduced X Y dimensions, and lower profile as solutions to their requirements. The TTI ceramic filter solutions allow design flexibility beyond traditional cavity styles. Table 1 provides the electrical specifications.

**Table 1. Electrical Specifications (Note 1)**

Parameter	Symbol	Test Condition	Minimum	Typical	Maximum	Units
<b>Transmit</b>						
Center frequency	fo			370		MHz
Poles				4		BPF
Bandwidth: Bandwidth Insertion loss @ BW	BW		20		+1.1	MHz dB
Passband return loss			+12			dB
Attenuation, band isolation	Tx		+60			dB
Impedance			50			Ω
<b>Receive</b>						
Center frequency	fo			310		MHz
Poles				4		BP
Bandwidth: Bandwidth Insertion loss @ BW	BW		20		+1.1	MHz dB
Passband return loss			+12			dB
Attenuation, band isolation	Rx		+50			dB
Impedance			50			Ω

**Note 1:** Performance is guaranteed only under the conditions listed in this Table.

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