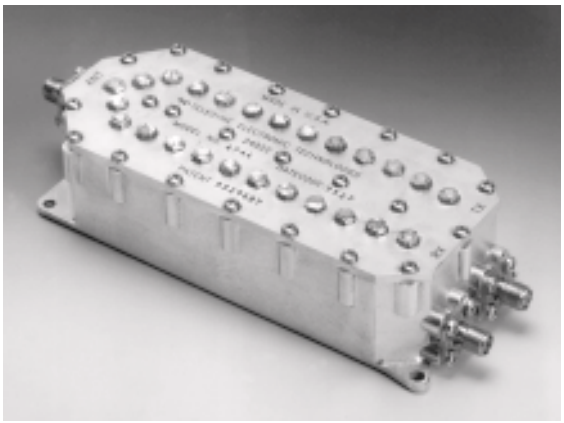
Product Information

ISO 9001 CERTIFIED

4744
PCS DUPLEXER



Features:

- ❖ Temperature Stability better than Aluminum
- ❖ Low Loss (1.0 dB, Typical)
- ❖ Lightweight, Injection Molded Housing
- ❖ 35 watts CW Power Handling
- ❖ Available from Stock
- ❖ Low Cost

Product Description:

The 4744 duplexer is designed for broadband Personal Communication Systems (PCS) operating in Major Trading Areas (MTA) and Basic Trading Areas (BTA). Frequency coverage offered with this single design include: Bands A and B for MTA's and Bands D and E for BTA's. Based upon our patented injection molded technology, Teledyne is setting new standards for low cost, lightweight filters for cellular basestations. Custom designs are available for specific PCS applications while still maintaining the same low cost, lightweight features as the 4744 duplexer featured here. Cross coupling techniques are often utilized for increased rejection and size reduction. The 4744 is available from stock and can be shipped within 24 hours.

TABLE OF SPECIFICATIONS

PARAMETER	FREQUENCY (MHz)	SPECIFICATIONS (GUARANTEED / TYPICAL)
Receive Band:		
Passband	1850 - 1890 MHz	
Insertion Loss	1850 - 1890 MHz	1.2 dB max. / 1.0 dB
Input / Output VSWR	1850 - 1890 MHz	1.5:1 max. / 1.35:1
Transmit Band:		
Passband	1930 - 1970 MHz	
Insertion Loss	1930 - 1970 MHz	1.2 dB max. / 1.0 dB
Input / Output VSWR	1930 - 1970 MHz	1.5:1 max. / 1.35:1
Interchannel Isolation:		
Tx to Rx	1850 - 1890 MHz	50 dB min. / 55 dB
Rx to Tx	1930 - 1970 MHz	50 dB min. / 55 dB
Weight		6.0 oz., 171.1 grams
Power Handling (CW)		35 watts
Operating Temperature		-35°C to +85°C
Storage Temperature		-50°C to +95°C

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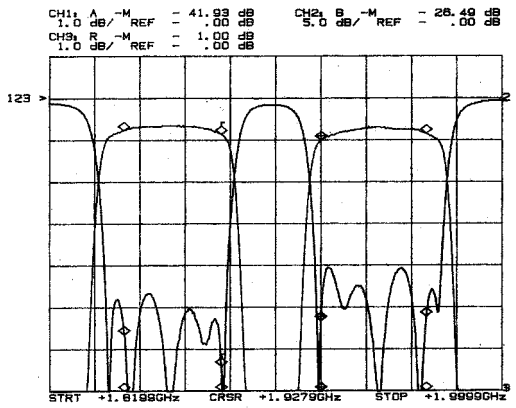
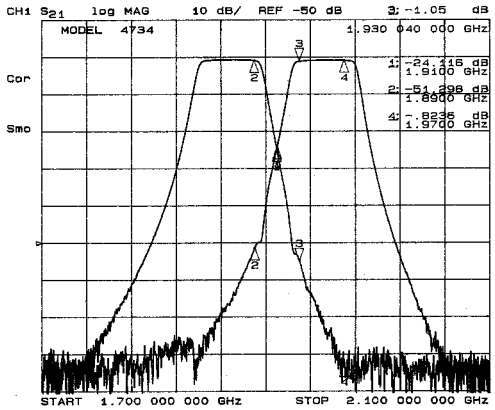
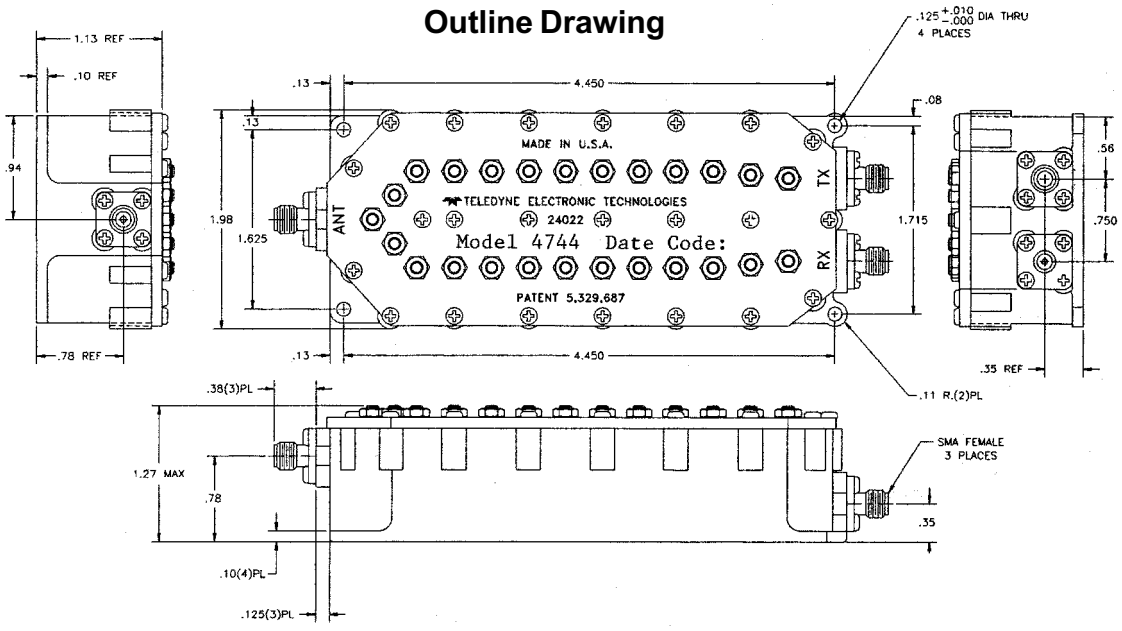
Typical Insertion Loss and VSWR



Typical Rx to Tx and Tx to Rx Rejection



Outline Drawing



Other filter designs available include: PCS, GSM 900, GSM 1800, GSM 1900, PDC, PHP, and INMARSAT-M applications.

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