

TPRD-1544F PASS-REJECT DUPLEXER



TPRD-1544F with
TWX-5 spacers

The Telewave.io TPRD-1544F allows simultaneous operation of a transmitter and receiver into a common antenna. This pass-reject duplexer utilizes folded four-inch cavities to achieve high "Q" in a compact size.

Telewave.io folded cavities utilize a special construction technique and circuit design which allow a physically shorter cavity to produce nearly the same performance as a standard length cavity.

The TPRD-1544F duplexer uses two folded pass-reject cavities in the

transmitter and receiver sections, for frequency spacing of 2 MHz or more. Selectivity and insertion loss may be adjusted by rotating the calibrated connector loops.

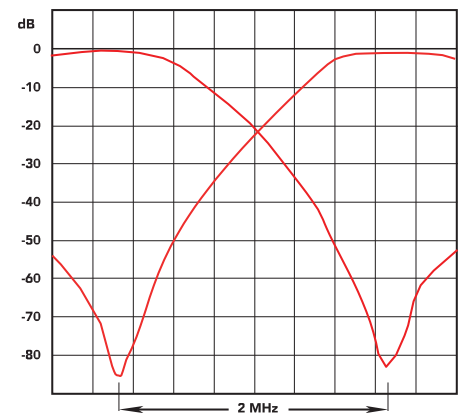
This duplexer is designed to mount horizontally on a 19" rack. Spacing brackets are available to allow mounting in a cabinet with 5" or 8" depth from the front.

Telewave.io duplexers feature cavities with ¼" aluminum top plates, which are fully welded to the aluminum outer conductor. Silver-plated tuners,

beryllium copper finger stock contactors and threaded Invar rods assure maximum temperature stability, and many years of trouble free operation.

All duplexers are tuned and tested with customer-specified frequencies prior to shipping. If frequency changes are required, the positive locking mechanism allows for straightforward field tuning by rotating the threaded Invar rod.

ELECTRICAL SPECIFICATIONS	
Tuning range	148-174 MHz
Frequency separation (min)	2 MHz
Maximum input power	350 watts
Insertion loss TX / RX to ant. (typ.)	1.0 dB
TX noise suppression at RX (min)	80 dB at 2 MHz
RX isolation at TX (min)	80 dB at 2 MHz
VSWR (max)	1.5:1
Temperature range	-30°C to +60°C
Number of cavities	(4) - 4"
MECHANICAL SPECIFICATIONS	
Mounting	19" Rack mount
Dimensions (HWD) in. (cm) (Tuners fully extended)	5.25 x 19 x 17 (13.3 x 48.3 x 43.2)
Connectors	N or UHF Female
Finish	Gray acrylic enamel
Net weight lb. (kg)	15 (6.8)



TYPICAL RESPONSE