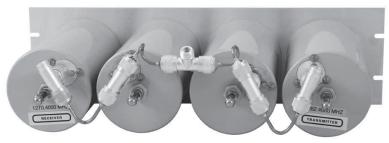


## **TPRD-12044**PASS-REJECT DUPLEXER





The Telewave TPRD-12044 Base Station Duplexer provides high performance and high reliability for the 23 cm Amateur Radio band. With two Pass/Reject cavities in each transmitter and receiver path, these duplexers provide maximum TX to RX protection in dense RF environments.

Mil-Spec semi-rigid cable is used for all interconnections to ensure long life, and lowest insertion loss with maximum power handling capability.

Heavy-duty materials are used in construction of this duplexer, including silver-plated tuners and beryllium copper fingerstock contactors, assuring high "Q" performance with no problems

due to dissimilar metals. Tuning is simple and remains stable from -30° C to +70° C, thanks to the threaded Invar tuning rod.

Adjustable coupling optimizes the required attenuation for ideal RX performance. All cavity inputs are electrically shorted to ground for maximum static and noise protection.

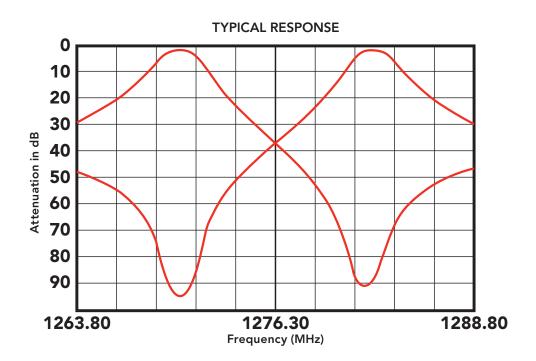
All duplexers are tuned and tested with customer-specified frequencies prior to shipping. No further adjustments should be required. The positive locking mechanism allows for easy field tuning if frequency changes are implemented.

The TPRD-12044 mounts on a 19" standard rack, with panel height of 5.25". Power handling is 250 watts. Receiver desense protection is at least 80 dB, and TX sideband suppression is at least 80 dB.

Typical spacing is 12 MHz. With TX to RX spacing of 6 MHz or more, this duplexer can also combine two transmitters into one antenna, or feed two receivers. Frequency spacing and other requirements must be specified with all orders.



## **TPRD-12044**



ELECTRICAL SPECIFICATIONS	
Frequency range	1240-1300 MHz
Frequency separation (typ. / min)	12 MHz / 6 MHz
Maximum input power	250 watts
Insertion loss (TX/RX to ant., typ)	1.0 dB
TX noise suppression at RX (min)	80 dB
RX attenuation at TX (min)	80 dB
TX-RX isolation for 6 MHz separation (min)	80 dB
VSWR (max)	1.5:1
Impedance	50 ohms
Temperature range	-30°C to +70°C
MECHANICAL SPECIFICATIONS	
Number of cavities	(4) - 4" Dia. x 8" L
Dimensions (HWD) in. (cm)	5.25 x 19 x 10.5 (13 x 48 x 26.67)
Mounting	19" Panel
Connectors	N Female
Finish	Acrylic enamel
Net weight lb. (kg)	21 (9.6)
Shipping weight lb. (kg)	26 (11.8)

**NOTE:** Exact transmitter and receiver frequencies must be specified.