

## TPRD-4554, 4556 PASS / REJECT DUPLEXERS



TPRD-4554



TPRD-4556

The Telewave Model TPRD-4554 and TPRD-4556 duplexers allow simultaneous operation of a transmitter and receiver into a common antenna. These pass-reject duplexers are ideal for systems with very close frequency spacing of 1 MHz or more.

The Telewave TPRD-4554 has two  $\frac{3}{4}$ -wave pass-reject cavities in the transmitter and receiver sections. The TPRD-4556 has three  $\frac{3}{4}$ -wave pass-reject cavities in the transmitter and receiver sections for additional isolation.

Because of their superior construction, these Telewave 5" cavity duplexers achieve greater rejection of transmitter spurious and noise radiation, providing excellent receiver protection.

Telewave duplexers have  $\frac{1}{4}$ " 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, higher "Q", and many years of trouble free operation.

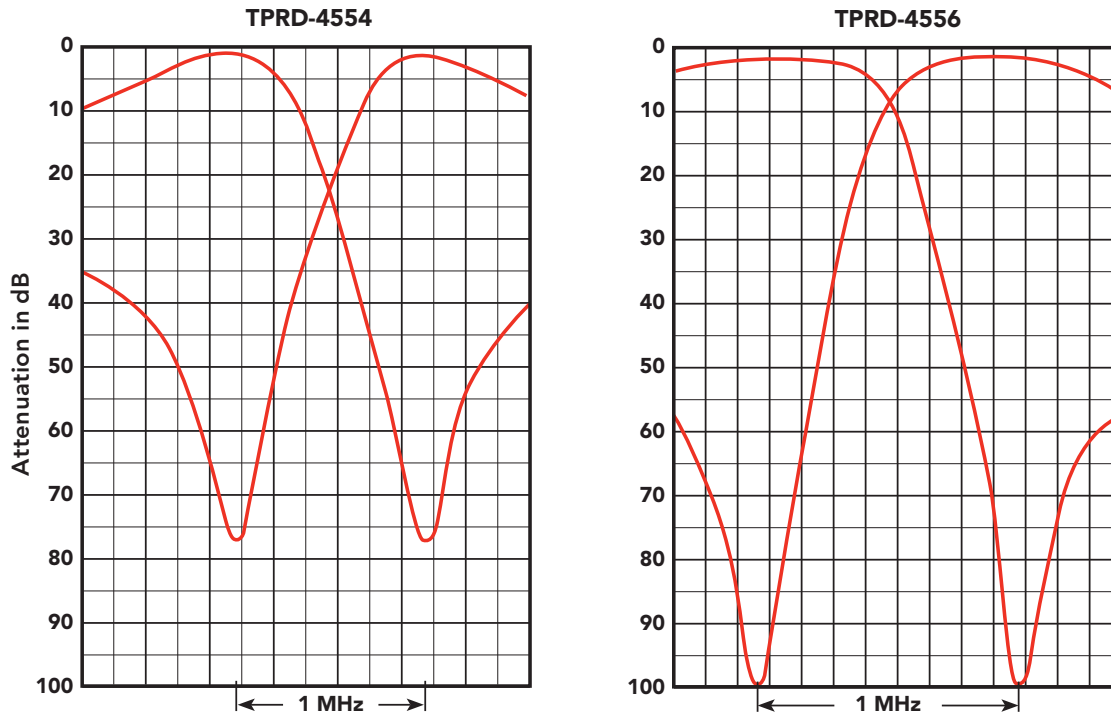
Selectivity and insertion loss may be adjusted by rotating the calibrated connector loops. (See next page for typical response curves.)

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

The optional TBC-40 indoor cabinet completely encloses the duplexer, and protects it from dust, dirt and tampering. All connections are accessible from the top of the cabinet.

# TPRD-4554, 4556

## TYPICAL DUPLEX RESPONSE



ELECTRICAL SPECIFICATIONS	TPRD-4554	TPRD-4556
Tuning range	400-512 MHz	
Frequency separation (min)	1 MHz	
Maximum input power	350 watts	
VSWR (max)	1.5:1	
Insertion loss TX/RX to ant.	1.5 dB	2.3 dB
RX isolation at TX frequency	80 dB at 1 MHz	95 dB at 1 MHz
TX noise suppression at RX frequency	80 dB at 1 MHz	95 dB at 1 MHz
Temperature range	-30°C to +70°C	
Cavities	(4) 5"	(6) 5"
MECHANICAL SPECIFICATIONS		
Dimensions (HWD) in. (cm) (Tuners fully extended)	28 x 19 x 11 (71.1 x 48 x 28)	28 x 19 x 11 (71.1 x 48 x 28)
Mounting	19" Rack or wall mount	
Connectors	N or UHF female (opt.)	
Finish	Acrylic enamel	
Net weight lb. (kg)	19 (8.6)	27 (12.3)

Specify model number and exact transmitter and receiver frequencies when ordering.