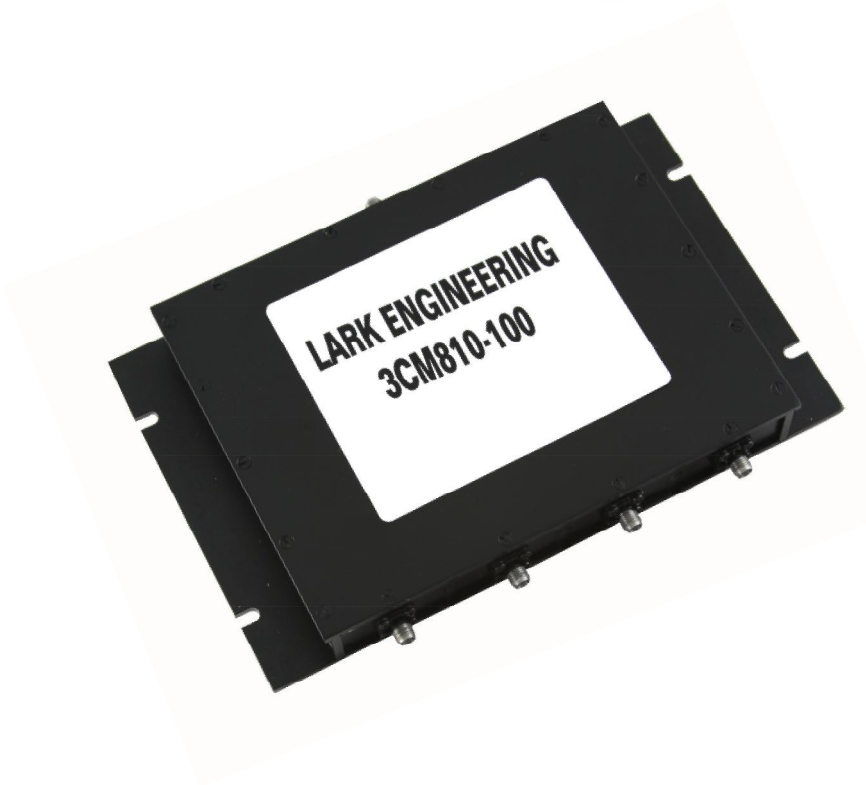


DIPLEXERS, TRIPLEXERS AND MULTIPLEXERS

Lark Engineering offers a wide array of Diplexers, Triplexers and Multiplexers over a frequency range of 100KHz to 20GHz. By creating a basic network of two or more bandpass series filters, Lark Engineering is able to separate the passband frequencies and apply the signal to isolated terminals. The passband of the individual network may be contiguous or separated by overlapping stopbands. Each filter is designed to give the best common junction match through the addition of input matching circuitry.



CERAMIC DIPLEXERS
APPLICATIONS STANDARDS

Part Number Application	Channel	Center Frequency	BW (MHz)	BW I.L (dBa max.)	VSWR in BW	DELAY MIN/ MAX(ns)	Channel Isolation Min.
3MXD836.5/881.5-X25-33CC Cellular Amps	Low High	836.5 881.5	25 25	3.5 3.5	2.0 2.0	10/30 12/40	20dBc 20dBc
3MXD1227/1575-X10-33CC GPS	Low High	1227.0 1575.0	10 10	3.7 4.2	2.0 2.0	16/23 18/22	50dBc 50dBc
3MXD1880/1960-X60-33CC PCS	Low High	1880 1960	60 60	3.5 3.5	2.0 2.0	4/16 4/20	10dBc 10dBc
5MXD836.5/881.5-X25-55CC Cellular Amps	Low High	836.5 881.5	25 25	3.0 3.0	2.0 2.0	20/50 20/50	40dBc 40dBc
5MXD1747.5/1845.5-X75-55CC DCS	Low High	1747.5 1842.5	75 75	3.5 3.5	2.0 2.0	10/32 10/32	30dBc 35dBc
5MXD1880/1960-X60-55CC PCS	Low High	1880 1960	60 60	3.5 3.5	2.0 2.0	10/32 10/32	30dBc 35dBc

Lark Engineering’s diplexer series is based on the technology of our ceramic filters. The construction uses a board carrier with outputs in the corners. The common junction port is axial along one side to give the best channel to channel isolation. The filters are designed to give the best common junction match

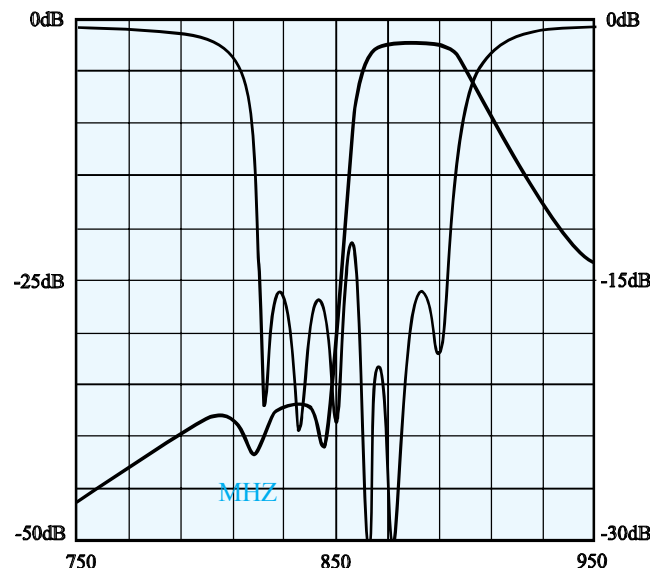
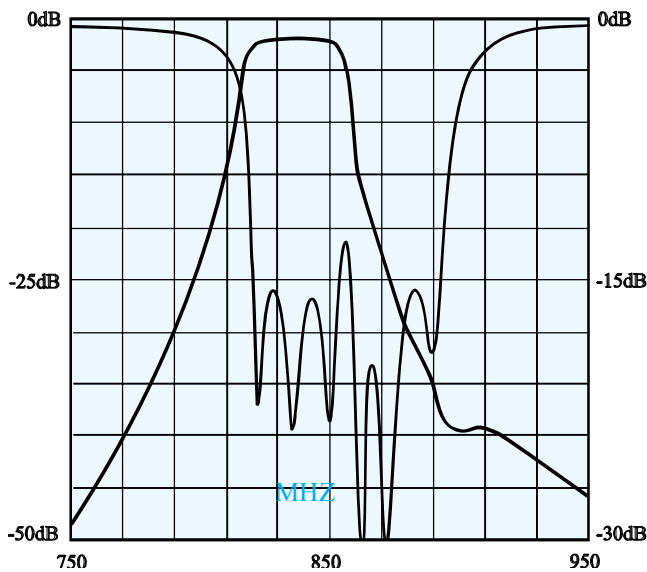
through the addition of input matching circuitry. The applications standards listed above use the same number of sections for both channels. This need not be the case, as our design algorithms are capable of matching any two non-contiguous passbands using various filter configurations.

TRANSMISSION

REFLECTION

TRANSMISSION

REFLECTION



TYPICAL PERFORMANCE
3MXD836.5/881.5-X25-33CC