



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.

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	836.5	25	3.5	2.0	10/30	20dBc
	High	881.5	25	3.5	2.0	12/40	20dBc
3MXD1227/1575-X10-33CC GPS	Low	1227.0	10	3.7	2.0	16/23	50dBc
	High	1575.0	10	4.2	2.0	18/22	50dBc
3MXD1880/1960-X60-33CC PCS	Low	1880	60	3.5	2.0	4/16	10dBc
	High	1960	60	3.5	2.0	4/20	10dBc
5MXD836.5/881.5-X25-55CC Cellular Amps	Low	836.5	25	3.0	2.0	20/50	40dBc
	High	881.5	25	3.0	2.0	20/50	40dBc
5MXD1747.5/1845.5-X75-55CC DCS	Low	1747.5	75	3.5	2.0	10/32	30dBc
	High	1842.5	75	3.5	2.0	10/32	35dBc
5MXD1880/1960-X60-5CC PCS	Low	1880	60	5.0	2.0	10/32	30dBc
	High	1960	60	4.0	2.0	10/32	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 Filters configurations.

## Typical Performance

### Typical Performance 3MXD836.5/881.5-X25-33CC

