

WAVEGUIDE HARMONIC FILTERS

- High Power
- High Rejection
- Low Loss
- Low VSWR
- Unique Design

MCI's UHF waveguide harmonic filters are designed for use in all UHF systems. A new synthesis technique is used in the design of the corrugated waveguide low pass filters. This new synthesis method provides filters that can be constructed directly from dimensions calculated by a computer program. This reduces the amount of "fine tuning" for each individual filter and eliminates any major adjustments.

This new technique provides for a filter with high rejection at the 2nd and 3rd harmonics. The filters are available in three standard waveguide sizes. Standard length filters provide better than 40dB of rejection. Lower rejection (20dB) filters can be manufactured in a shorter length, and must be ordered per application.

High Rejection (100) dB @ 2nd are also available.

Fundamental				
VSWR:	<1.06:1			
Insertion Loss:	0.10 dB			
2 nd Harmonic Rejection:*	> 40 dB			
3 rd Harmonic Rejection:*	> 30 dB			
* Rejection at $2(F_v \& F_a)$				
$3(F_v \& F_a)$				
or @ Band for DTV Applications				

		UHF		
FREQUENCY (MHz)		470-536	536-680	650-800
CHANNEL		14-24	24-48	44-69
MODEL		44119	44118	44117
POWER		240 kW	240 kW	240 kW
LENGTH	in	60	53	53
	(cm)	(152.40)	(134.62)	(134.62)
WEIGHT	lbs	180	120	100
	(kg)	(81.65)	(54.43)	(45.36)
W/G SIZE		WR1800	WR1500	WR1150

All specifications are subject to change without notice.

