

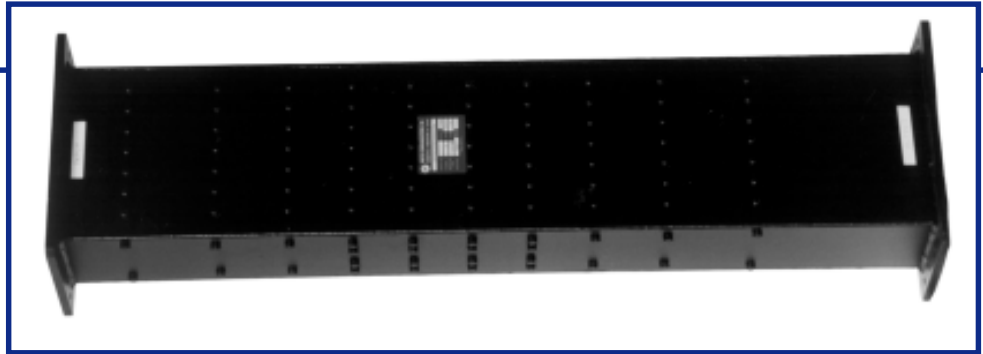


Micro Communications, Inc.

Microwave A MICROWAVE TECHNIQUES COMPANY

# 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 2<sup>nd</sup> and 3<sup>rd</sup> 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 @ 2<sup>nd</sup> are also available.

SPECIFICATIONS	
Fundamental	VSWR: <1.06:1
	Insertion Loss: 0.10 dB
2 <sup>nd</sup> Harmonic Rejection:*	> 40 dB
3 <sup>rd</sup> Harmonic Rejection:*	> 30 dB

\* Rejection at 2(F<sub>v</sub> & F<sub>a</sub>)  
3(F<sub>v</sub> & F<sub>a</sub>)  
or @ Band for DTV Applications

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

All specifications are subject to change without notice.



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