Filters designed to safely eliminate harmonics

New from the Engineering Division of Link Microtek is a series of eight waveguide harmonic-absorption filters that are designed to safely eliminate harmonics from the output of a high-power microwave amplifier, thereby ensuring that only fundamental frequencies are transmitted and that there are no potentially damaging reflections back into the system.

The AMQ-HARM-T1 series filters offer pass bands equivalent to the full waveguide band at each size from WR430 to WR28, covering microwave frequencies from 1.7 to 40.1GHz.
Utilising a so-called ‘compact’ design with the absorption elements located on the broad wall of the device, the filters achieve a stop-band rejection of better than 20dB up to the
third harmonic. They have a power handling capacity of at least 200W, a low insertion loss of 0.25dB and a low VSWR of 1.1:1 for the pass band.

As well as being ideal for use in standards laboratories and test houses, the devices are also suitable for operational applications in radar and communications systems, depending on the waveguide size selected.

Designed and manufactured at Link Microtek’s premises in the centre of Basingstoke, the AMQ-HARM-T1 filters are fabricated from Alochromed aluminium to minimise weight and are finished in black satin paint.

Link Microtek
www.linkmicrotekeng.com [1]

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