

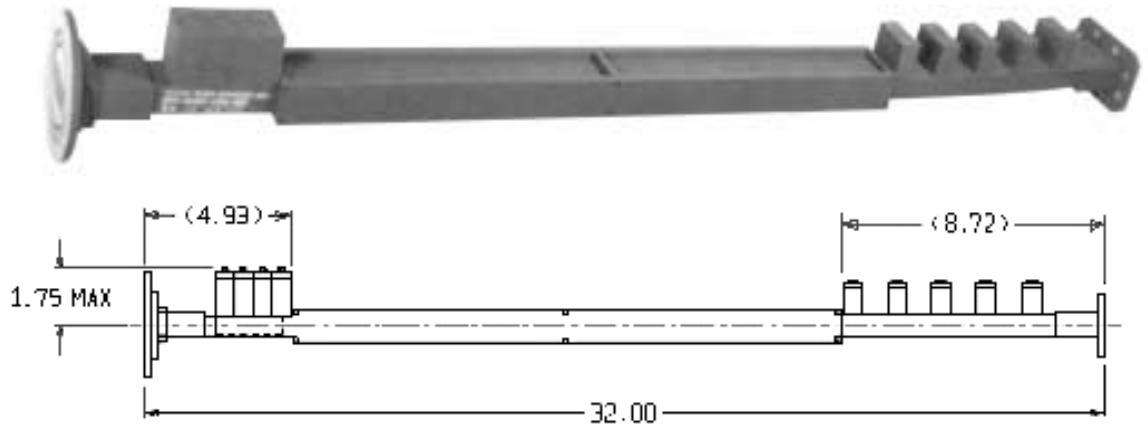


BAND PASS FILTER (J70B-529)

DATA SHEET
No. T155

- LOW LOSS
- HIGH REJECTION
- RUGGED CONSTRUCTION

MEC model J70B-529 is a WR137 Band Pass Filter with finite transmission zeros. It covers one of the communication tri-bands commonly used for satellite up-link and down-link communications.



This design features copper construction which helps to minimize losses – the insertion loss is just 0.5 dB. Flanges are aluminum to avoid incompatibility of dissimilar metals in an aluminum waveguide system installation. The filter has external aluminum support brackets to aid mechanical rigidity. There are two reject bands with ultra sharp rejection skirts and high attenuation. Two notch filters are used to achieve out of band rejection of 100 dB @ $F_c+2\%$.

SPECIFICATIONS:

| | |
|----------------------------|--|
| Model Number | J70B-529 |
| Pass Band Frequency | 7.25-7.75 GHz |
| VSWR | 1.2:1 Max |
| Insertion Loss | 0.50 dB Max 7.30 - 7.75 GHz |
| | 0.54 dB Max 7.25 - 7.30 GHz |
| Amplitude ripple | ± 0.10 dB over any 40 MHz segment in the frequency range |
| Non linearity | $\pm 3^\circ$ over any 30 MHz segment |
| | $\pm 4^\circ$ over any 40 MHz segment |
| Stop Bands | <7.1 GHz & 7.9 to 9.6 GHz |
| Attenuation | 100 dB Min at ≤ 7.10 GHz and 7.90-9.60 GHz |
| Power | 6 KW Pk, 360 W Ave |
| Input/Output Ports | WR137 |

Data subject to change without notice



MICROWAVE ENGINEERING CORPORATION

1551 OSGOOD STREET, NORTH ANDOVER, MA 01845 • TEL (978) 685-2776 • FAX (978) 975-4363

Website: www.microwaveeng.com, Email: sales@microwaveeng.com