

Microwavefilters® & ®

Microwave components for telecommunication systems

Ka-Band Filters for SatCom Applications



**High Rejection
Flat Group Delay
Compact Size**

Microwavefilters & TVC srl

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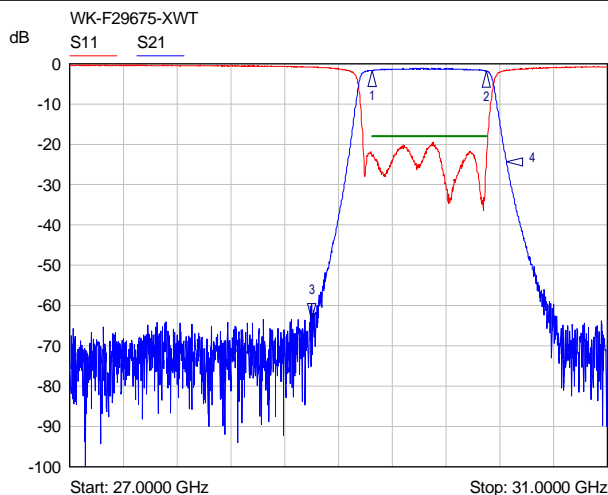
info@mw-tvc.com www.mw-tvc.com

MW&TVC presents a new family of bandpass filters in the Ka-Band (27÷30 GHz). They are compact (70x16x11 mm, including tuning screws), with high rejection and flat group delay (< 1 ns in any 80 MHz interval). Connectors can be 2.92 ('K') female and/or male.

Ka-Band Bandpass Filter Family

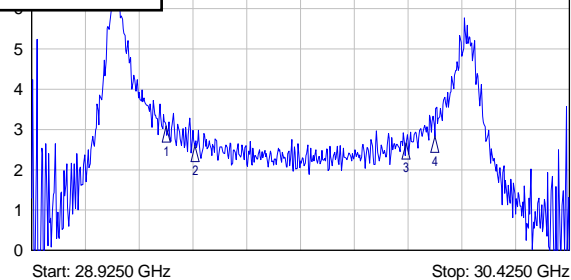
| Code | Central Frequency f_0 (GHz) | BW (MHz) | RL (dB) | IL (dB) | Rejection (dB) | Dimensions ¹ (mm) |
|---------------|-------------------------------|----------|---------|---------|-------------------------------------|------------------------------|
| MW-F27875-XWT | 27.875 | 850 | ≥ 18 | ≤ 2.2 | ≥ 50 @ 27.0 GHz ≥ 23 @ 28.45 GHz | 70 x 16 x 11 |
| MW-F28475-XWT | 28.475 | 850 | ≥ 18 | ≤ 2.2 | ≥ 50 @ 27.6 GHz ≥ 23 @ 29.05 GHz | 70 x 16 x 11 |
| MW-F29075-XWT | 29.075 | 850 | ≥ 18 | ≤ 2.2 | ≥ 50 @ 28.2 GHz ≥ 23 @ 29.65 GHz | 70 x 16 x 11 |
| MW-F29675-XWT | 29.675 | 850 | ≥ 18 | ≤ 2.2 | ≥ 50 @ 28.8 GHz ≥ 23 @ 30.25 GHz | 70 x 16 x 11 |

¹ Without connectors and including tuning screws.



An example of a typical frequency response (WK-F29675-XWT)

| Mkr | Trace | X-Axis | Value | Notes |
|-----|-------|-------------|-----------|-------|
| 1 | S21 | 29.2500 GHz | -1.62 dB | |
| 2 | S21 | 30.1000 GHz | -1.76 dB | |
| 3 | S21 | 28.8000 GHz | -63.46 dB | |
| 4 | S21 | 30.2500 GHz | -24.27 dB | |



| Mkr | Trace | X-Axis | Value | Notes |
|-----|-------|-------------|---------|-------|
| 1 | S21 | 29.3000 GHz | 3.09 ns | |
| 2 | S21 | 29.3800 GHz | 2.60 ns | |
| 3 | S21 | 29.9700 GHz | 2.66 ns | |
| 4 | S21 | 30.0500 GHz | 2.84 ns | |