



## Tunable Notch Filters Patent US 20170149109 A1

Lark Engineering's DIGITAL CONTROL filters are the new upcoming series of fast switching variable frequency filters that can make life easier for frequency hopping and secure communications systems. It provides a less complicated alternative to controlling and encrypting signals.

### Key Features (Typ.)

- Impedance : 50 Ohms
- Connectors : SMA female
- Tuning range : 1.1 - 1.4 GHz
- Return loss (Min.) : 13 dB (700-3000 MHz)
- Insertion loss (Max.) : 1 dB (700-2450 MHz)  
1.5 dB (2450-3000 MHz)
- 3 dB BW : 90MHz Min., 110 MHz Max.
- 40 dB BW : 20 MHz Min., 30 MHz Max.
- Power supply (Typ.) : 5V @ 350 mA, 94V\*
- Tuning control : 8 bits parallel (251 tune words  
from 00000000 to 11111010)\*\*
- Average power handling : 1 Watt
- Tuning speed : <50 microseconds
- Operating temperature : -40°C to +65°C
- Dimensions (HxWxL) : 1.5" x 1.90" x 5.7"

\*An internal DC-DC converter is optional (Eliminates need for high voltage power supply).

\*\* The filter comes with a Micro-D female connector, although dB9 or dB15 connectors can be specified as an option.

### Typical Response

