Preliminary Specifications

- Combines or Splits Tx and Rx Signals for 700 MHz Systems Lower ABC and Upper C Blocks
- <-153 dBc specified PIM
- High Isolation
- Low Insertion Loss
- Up to 60W power
- High reliability

Microlab Cavity Duplexer Model BL-39N allows combination and separation of the Tx and Rx signals in a duplex 700 MHz lower A, B, C blocks and upper C block signals. Units provide high isolation, and low insertion loss.

Attention to mechanical design, ensures low loss, and high reliability. Other models available for different bands and powers. (01/14).

Simulation Data

Rx Passband: 698-716 & 776-787 MHz (Rx Port)
Tx Passband: 728-757 MHz (Tx Port)
Insertion Loss: 1.3 dB max.
Passband Ripple: 0.8 dB max.
Return Loss, all ports: 18 dB min.
PIM (Intermod): <-153 dBc (measured in Rx Block using two +43 dBm tones in corresponding Tx Block)
Input Isolation: >60dB (between Tx/Rx bands)
Out of Band Rejection: >55dB, DC-740 & 806-894 MHz
Power Rating: 60W avg., 5 kW peak
Impedance: 50Ω nominal
Environment: -20°C to +60°C, IP64
Finish: Connectors: N (f) triplated
Housing Finish: Black Epoxy Paint

Tx (728-768 MHz)
Simulation Data

Rx (698-716 MHz)

Rx (776-798 MHz)
All dimensions in mm nominal