

## Specification for a LC Filter Diplexer Filter MtronPTI P/N: LF9422

### I. General & Electrical Requirements:

1. Port 1 Filter  
Center Frequency ( $F_{ON}$ ): 1780MHz  
Passband:  $F_{ON} \pm 70\text{MHz}$  (1710MHz to 1850MHz) minimum  
Insertion Loss (in the Passband): 1.0dB nominal, 1.25dB maximum  
Return Loss (in the Passband): 15.0dB minimum
2. Port 2 Filter  
Center Frequency ( $F_{ON}$ ): 2350MHz  
Passband:  $F_{ON} \pm 150\text{MHz}$  (2200MHz to 2500MHz) minimum  
Insertion Loss (in the Passband): 1.0dB nominal, 1.25dB maximum  
Return Loss (in the Passband): 15.0dB minimum
3. Common  
Port 1 to Port 2 Isolation: 15dB minimum  
Power Handling:  $\leq 5\text{-watts CW}$   
 $Z_{IN}/Z_{OUT}$  (all ports): 50 $\Omega$  nominal

### II. Environmental & Physical Requirements:

1. Environmental  
Temperature  
Operating (OTR): -40°C to +60°C  
Storage (STR): -55°C to +95°C
2. Package:  
Size: 1.000" (L) x 1.000" (W) x 0.200" (H, Max.)  
Type: SMD (production)

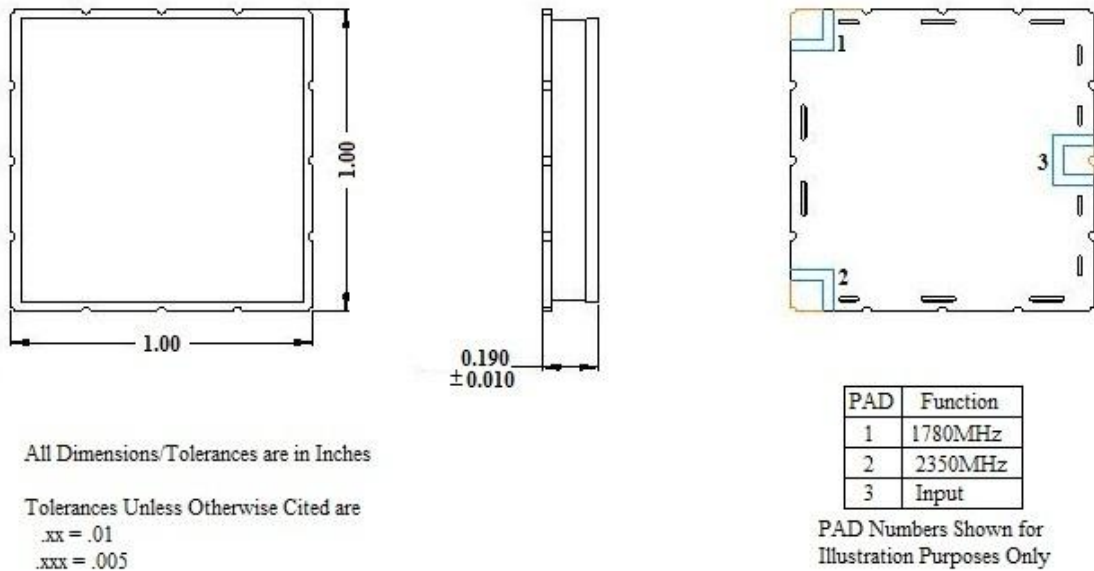
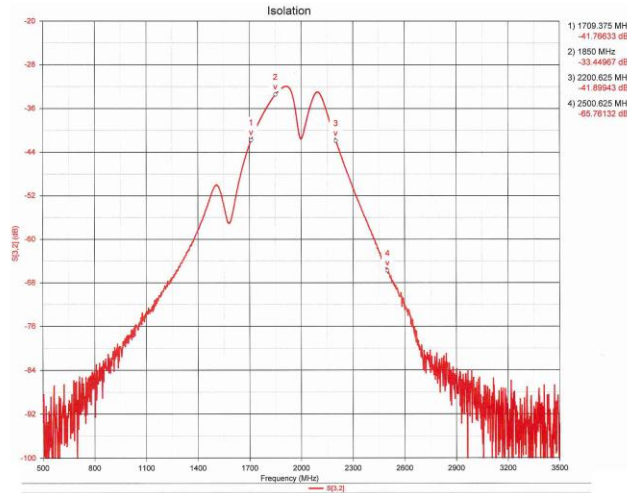
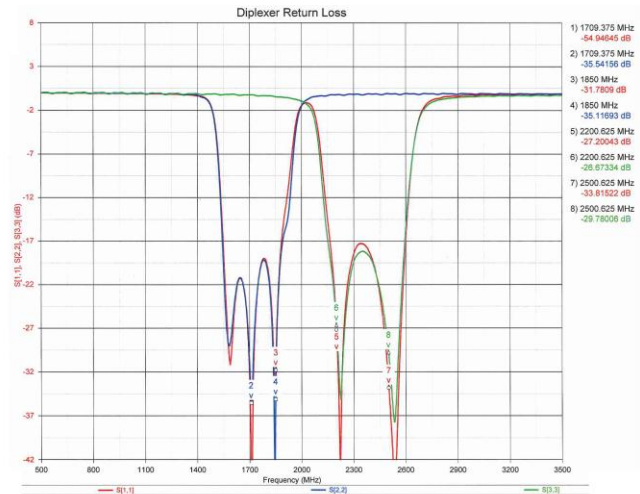
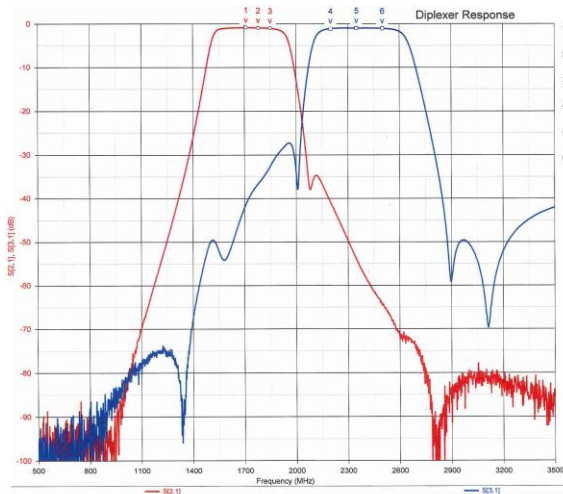


Figure 1: Production Model SMD Outline Drawing (TBD)

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### III. Engineering Model Plot(s):



### IV. Data Sheet Revision Table:

| Date     | Rev. | Author | Details of Revision                                                                                                              |
|----------|------|--------|----------------------------------------------------------------------------------------------------------------------------------|
| 03/20/13 | 2    | BRM    | Updated Outline Drawing to reflect correct dimensioning for tolerancing.                                                         |
| 03/19/13 | 1    | BRM    | Original Product Release, Updated Insertion Loss and Operating Temperature Range (OTR) specification. Added SMD Outline Drawing. |
| 02/08/13 | 0    | BRM    | Original Draft.                                                                                                                  |