2525 Shader Road Orlando Florida 32804 USA Phone: 407-298-2000 Fax: 407-293-2979 Website: www.mtronpti.com AMEX: LGL

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

### I. General & Electrical Requirements:

1. Port 1 Filter

Center Frequency (F<sub>ON</sub>): 1780MHz

Passband: F<sub>ON</sub> ±70MHz (1710MHz to 1850MHz) minimum

Insertion Loss (in the Passband): 1.0dB nominal, 1.25dB maximum

Return Loss (in the Passband): 15.0dB minimum

Port 2 Filter

Center Frequency (F<sub>ON</sub>): 2350MHz

Passband:  $F_{ON} \pm 150 MHz$  (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-watts CW  $Z_{IN}/Z_{OUT}$  (all ports):  $50\Omega$  nominal

#### II. Environmental & Physical Requirements:

1. Environmental

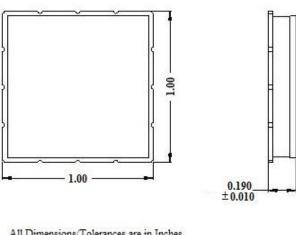
Temperature

Operating (OTR):  $-40^{\circ}$ C to  $+60^{\circ}$ C Storage (STR):  $-55^{\circ}$ C to  $+95^{\circ}$ C

Package:

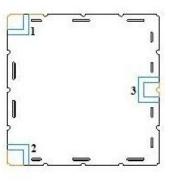
Size: 1.000" (L) x 1.000" (W) x 0.200" (H, Max.)

Type: SMD (production)



All Dimensions/Tolerances are in Inches

Tolerances Unless Otherwise Cited are .xx = .01.xxx = .005



PAD	Function
1	1780MHz
2	2350MHz
3	Input

PAD Numbers Shown for Illustration Purposes Only

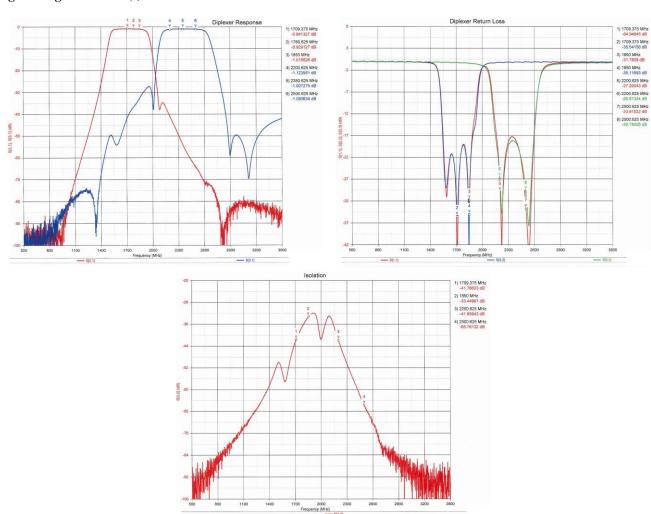
Figure 1: Production Model SMD Outline Drawing (TBD)



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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.