



### Electrical Specifications

**Center Frequency:** 640 MHz  
**3 dB Bandwidth:** 140 MHz  
**1 dB Passband:** 580-700 MHz  
**Passband:** 349.5-375.5 MHz  
**Insertion Loss at Center:** 0.5 dB Max  
**Phase Linearity:**  $\leq \pm 7.0^\circ$   
**Ripple:**  $\leq \pm 0.3$  dB  
**VSWR at 1dB Passband:** 1.5:1 Max  
**Rejection:** 30 dB @ DC-500 MHz  
30 dB @ 800-1000 MHz  
**Power Handling:** 15 Watts Max

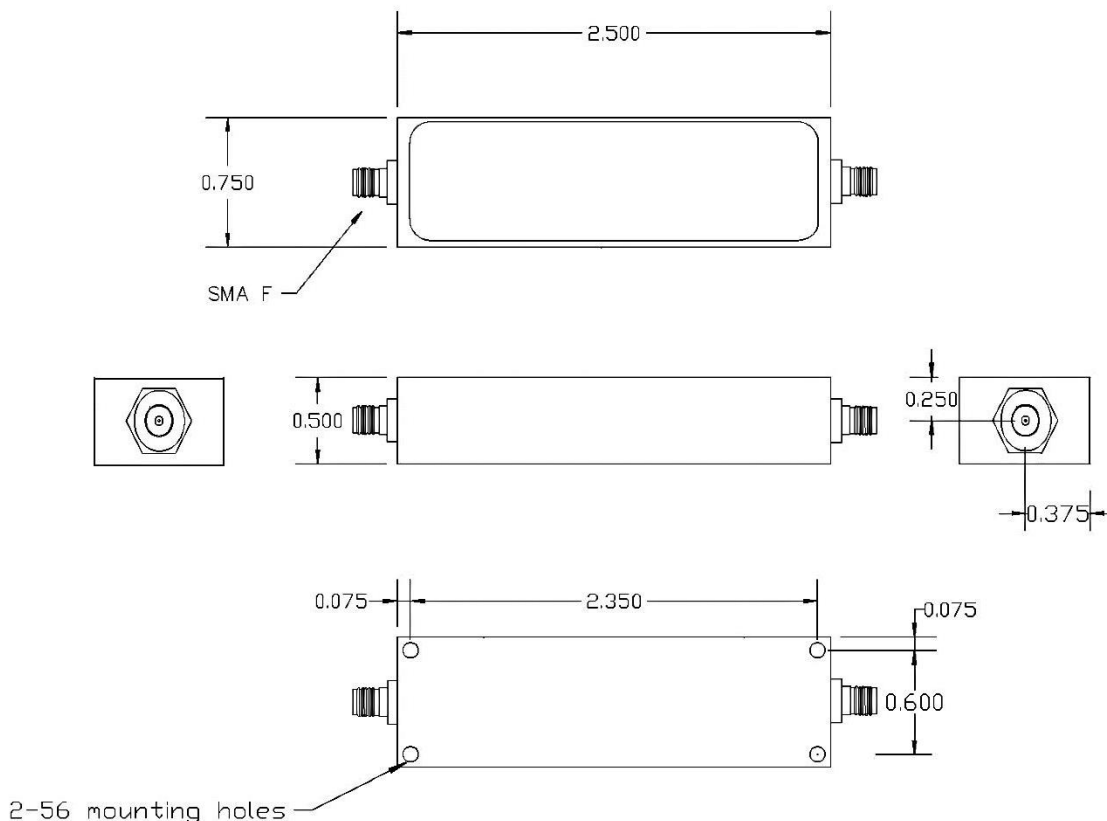
### Mechanical

**Connector Type:** SMA (F)  
**Dimensions:** 2.5 x 0.75 x 0.50 Inches

### Environmental

**Operating Temperature:** -45 to +85° C  
**Storage Temperature:** -65 to +95° C

### Outline Drawing:





# 640 MHz Cavity Band Pass Filter



**ANATECH ELECTRONICS INC**  
RF & Microwave Filters & Products

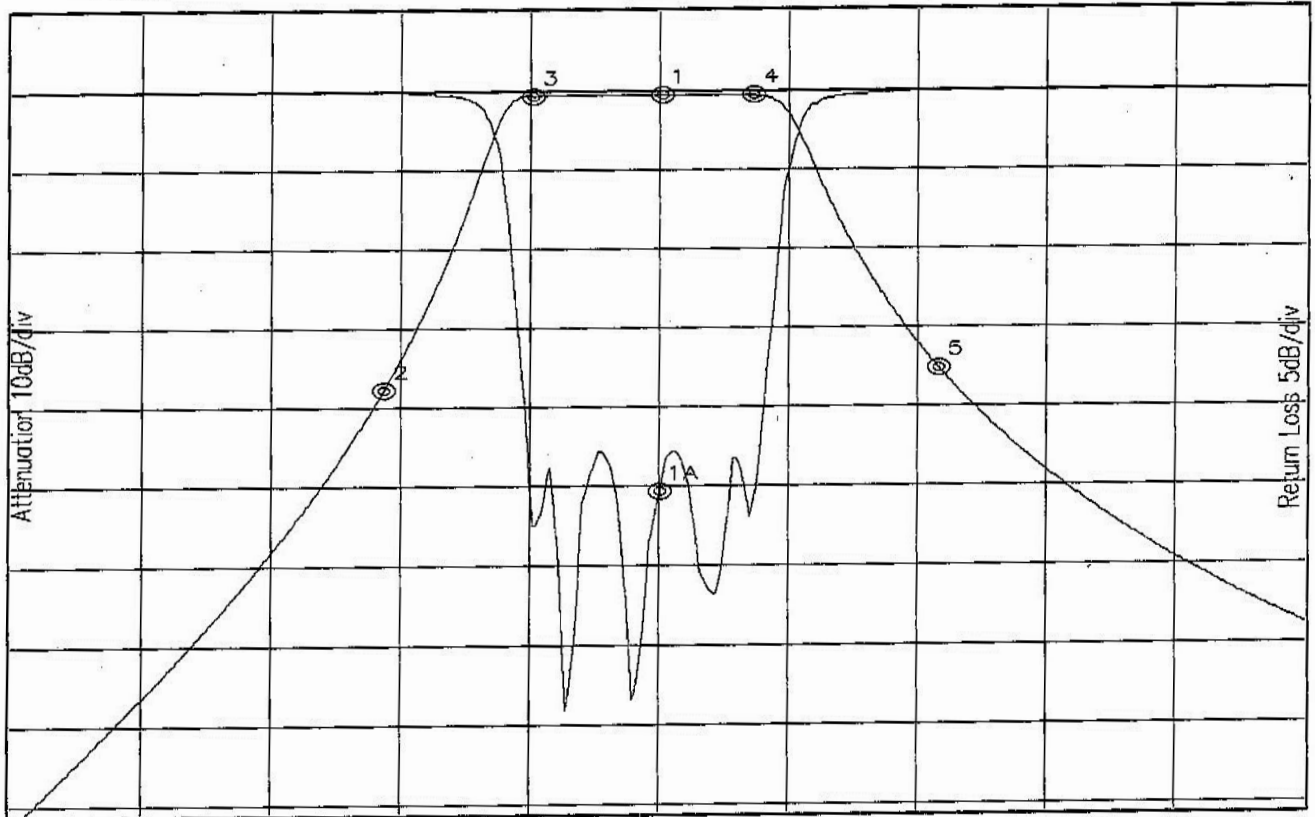
**Part Number: AE640B10908**

## Response Plot:

A2/2.lad

SEP 12, 2011

Attenuation/Return Loss



Attenuation Start: 300.0MHz Stop: 1000.0MHz

Return Loss Start: 300.0MHz Stop: 1000.0MHz

Marker 1 Freq 650.56MHz Atten -0.395dB  
 Marker 2 Freq 500.16MHz Atten -37.510dB  
 Marker 3 Freq 580.45MHz Atten -0.594dB  
 Marker 4 Freq 700.32MHz Atten -0.527dB  
 Marker 5 Freq 800.96MHz Atten -35.052dB

Marker 1A Freq 649.43MHz Ret Loss -25.243dB

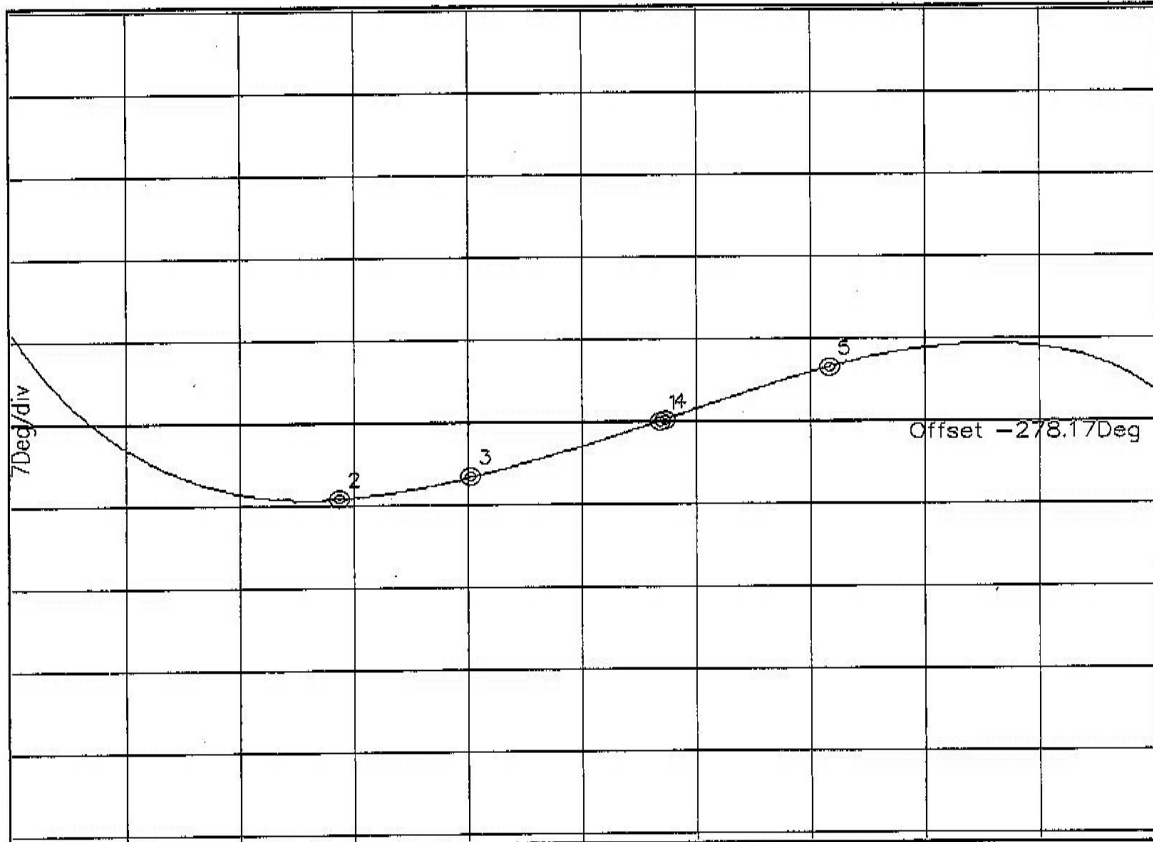


### Phase:

A2/2.lad

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Phase



Phase Start: 580.0MHz Stop: 700.0MHz

- Marker 1 Freq 648.04MHz Phase 0.049Deg
- Marker 2 Freq 614.31MHz Phase -6.410Deg
- Marker 3 Freq 628.07MHz Phase -4.616Deg
- Marker 4 Freq 648.62MHz Phase 0.206Deg
- Marker 5 Freq 665.88MHz Phase 4.611Deg