



# 121-243 MHz / 380-500 MHz Duplexer



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

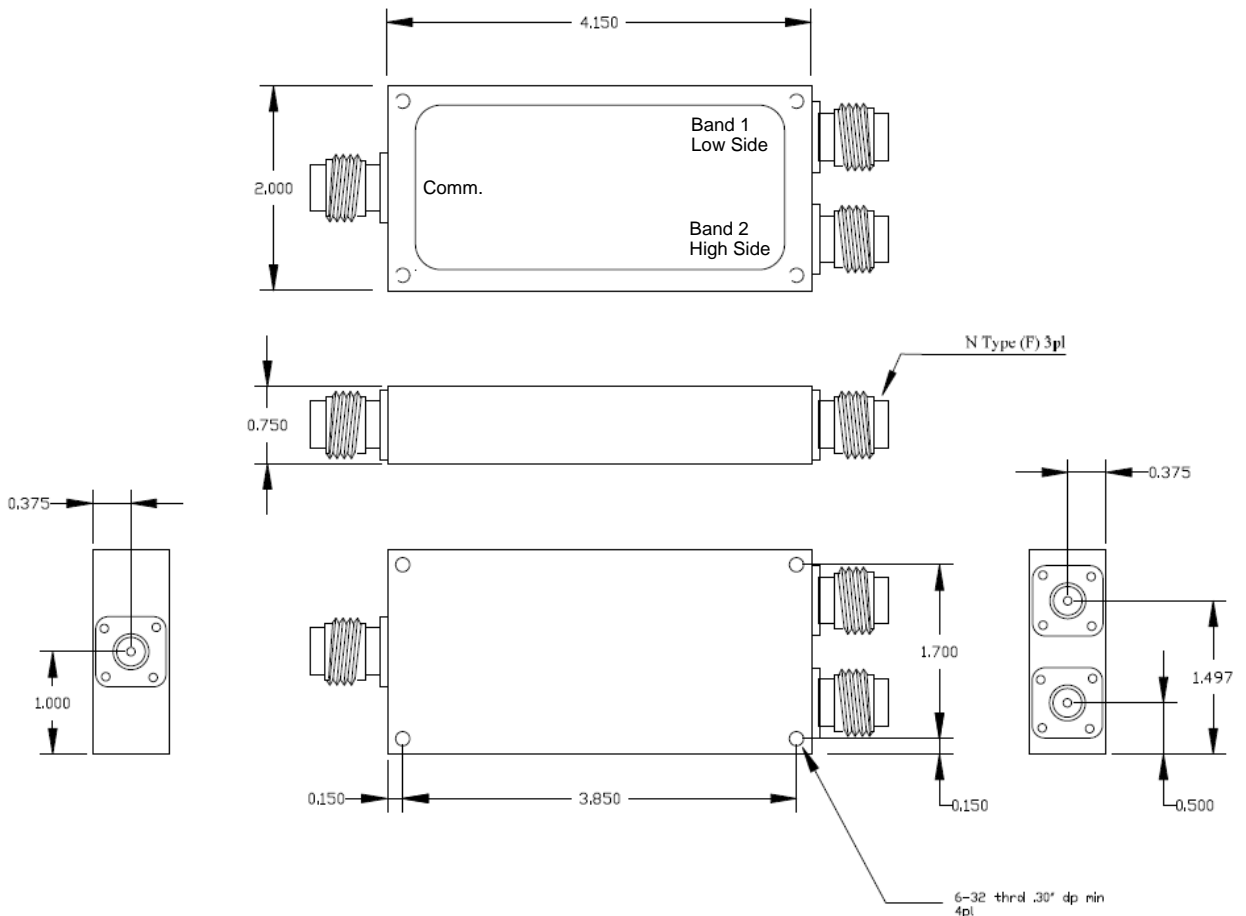
**Part Number: AE182-440DB5375**

<u>Characteristics</u>	<u>Band 1</u>	<u>Band 2</u>
<b>Passband:</b>	121-243 MHz	380-500 MHz
<b>Bandwidth:</b>	122 MHz	120 MHz
<b>VSWR:</b>	1.5	1.5
<b>Passband Insertion Loss:</b>	1 dB max	1 dB max
<b>Input / Output Impedance:</b>	50 Ohms	50 Ohms
<b>Rejection:</b>	60 dB @ 30 MHz	60 dB @ 850-900 MHz
<b>Isolation:</b>	60 dB	60 dB
<b>Power Handling:</b>	50W avg. & 75W peak	50W avg. & 75W peak

<u>Mechanical</u>	
<b>Mounting Method:</b>	Threaded Mounting Holes
<b>Connector Type:</b>	N-Type (F)
<b>Dimensions:</b>	4.15 x 2 x 0.75 inches

<u>Environmental</u>	
<b>Operating Temperature:</b>	-0 to +60 deg.C
<b>Storage Temperature:</b>	-50 to +90 deg.C

## Outline Drawing:





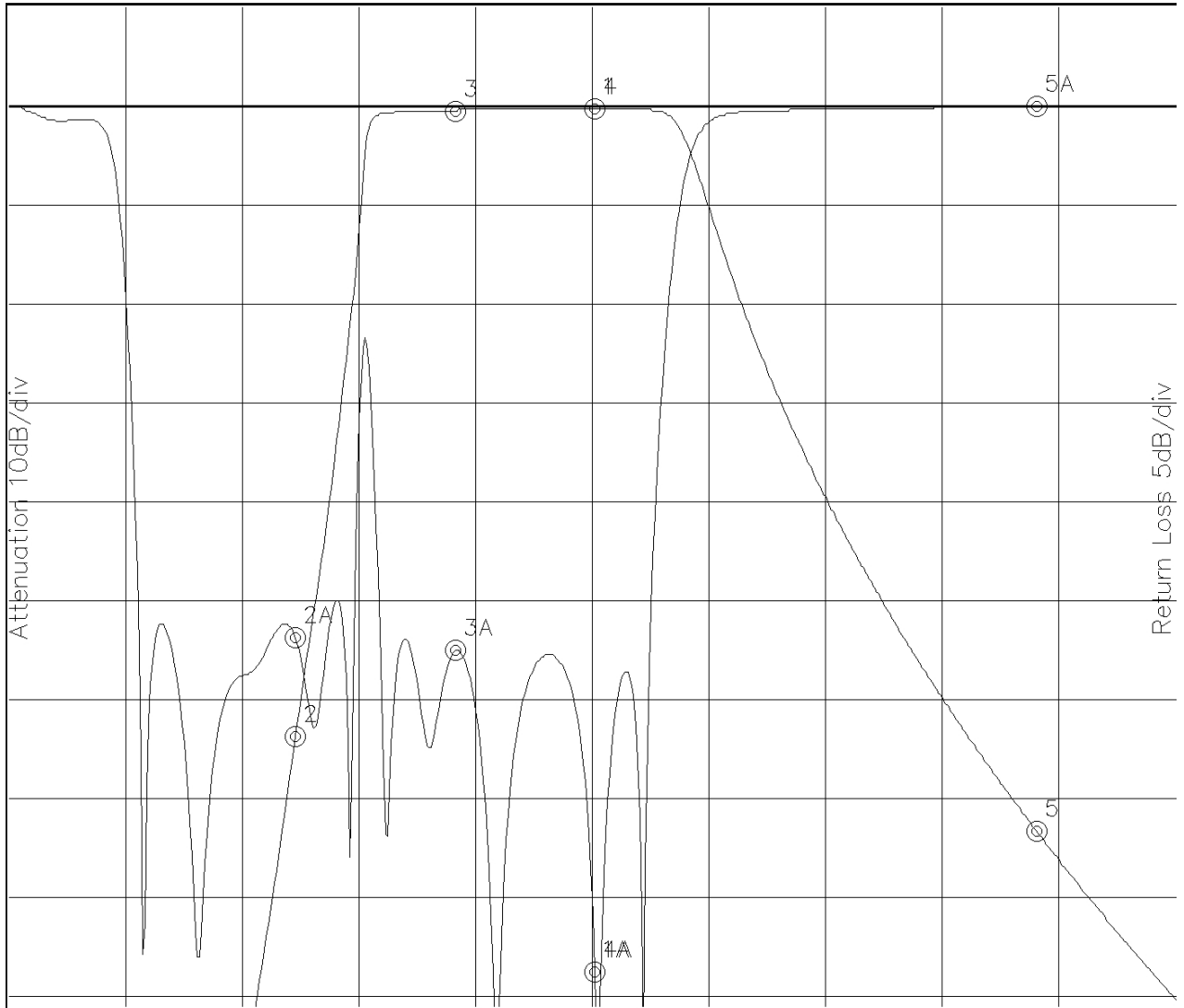
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## Response Plots:



Attenuation Start: 0.10Hz Stop: 1000.0MHz

Return Loss Start: 0.10Hz Stop: 1000.0MHz

Marker 1 Freq 500.80MHz Atten -0.247dB  
 Marker 2 Freq 243.94MHz Atten -63.501dB  
 Marker 3 Freq 381.26MHz Atten -0.329dB  
 Marker 4 Freq 500.80MHz Atten -0.247dB  
 Marker 5 Freq 880.45MHz Atten -73.013dB

Marker 1A Freq 500.80MHz Ret Loss -43.621dB  
 Marker 2A Freq 243.94MHz Ret Loss -26.759dB  
 Marker 3A Freq 381.26MHz Ret Loss -27.445dB  
 Marker 4A Freq 500.80MHz Ret Loss -43.621dB  
 Marker 5A Freq 880.45MHz Ret Loss 0.000dB



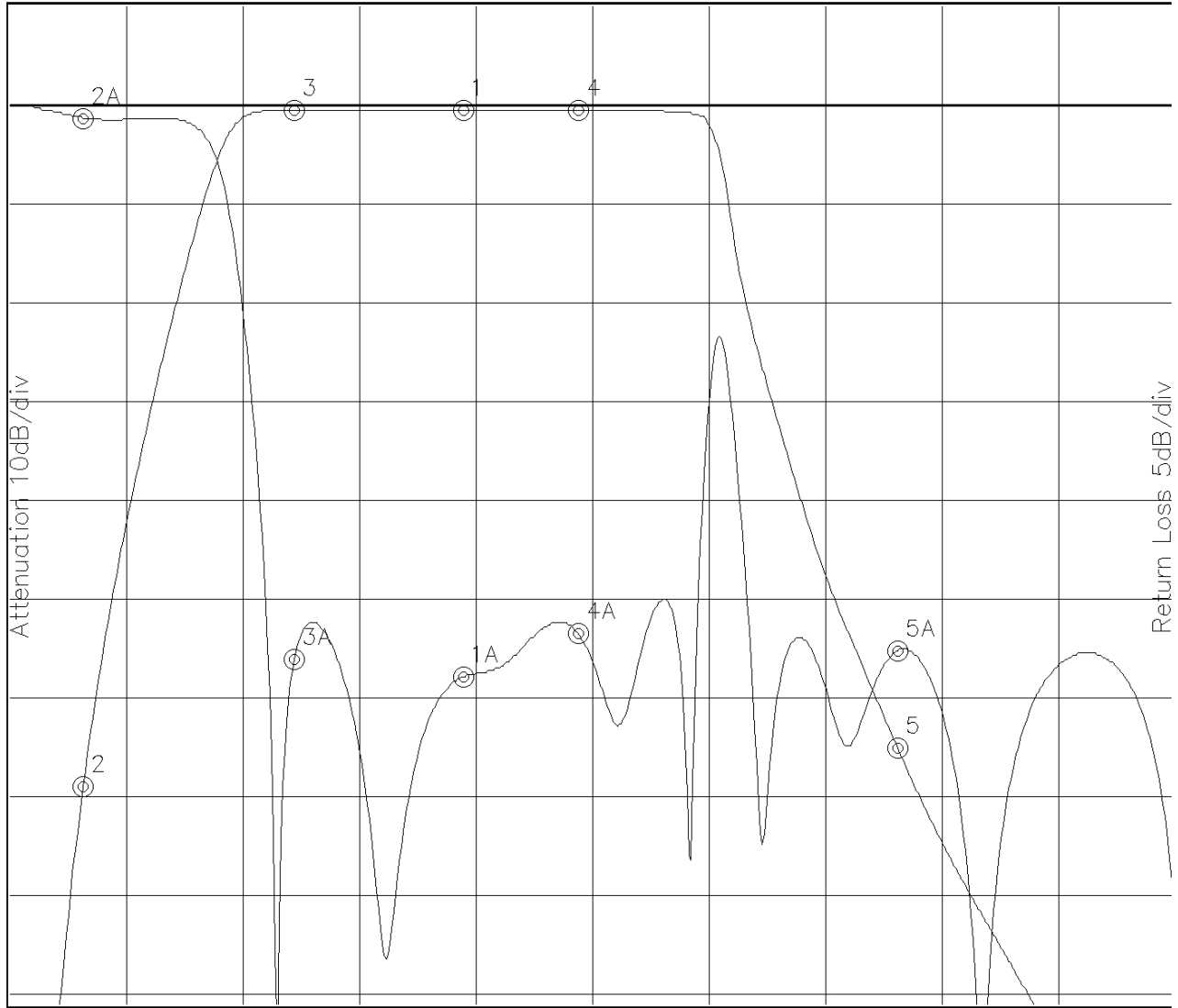
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## Response Plots:



Attenuation Start: 0.050Hz Stop: 500.0MHz

Return Loss Start: 0.050Hz Stop: 500.0MHz

Marker 1 Freq 193.86MHz Atten -0.345dB  
 Marker 2 Freq 30.695MHz Atten -68.697dB  
 Marker 3 Freq 121.16MHz Atten -0.445dB  
 Marker 4 Freq 243.13MHz Atten -0.392dB  
 Marker 5 Freq 380.45MHz Atten -64.754dB

Marker 1A Freq 193.86MHz Ret Loss -28.797dB  
 Marker 2A Freq 30.695MHz Ret Loss -0.608dB  
 Marker 3A Freq 121.16MHz Ret Loss -27.950dB  
 Marker 4A Freq 243.13MHz Ret Loss -26.629dB  
 Marker 5A Freq 380.45MHz Ret Loss -27.482dB