



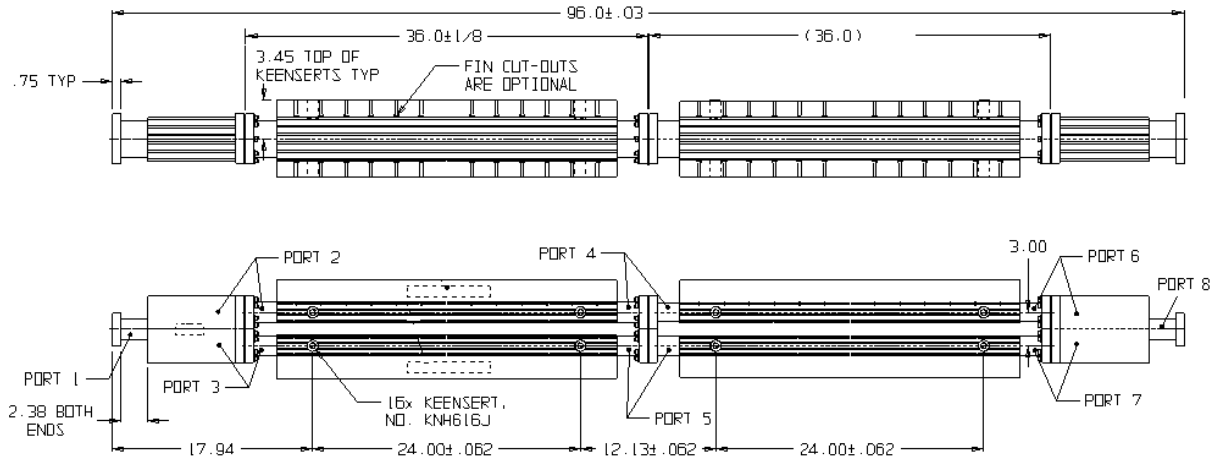
# SUPER HIGH POWER BALANCED LOW PASS FILTER (S70L-345)

**DATA  
SHEET  
No. T148**

- **SUPER HIGH POWER**
- **LOW LOSS**
- **HIGH REJECTION**
- **RUGGED CONSTRUCTION**

## DESCRIPTION

MEC's S70L-345 is a WR284 Super High Power Low Pass Filter. It operates at S-band and handles 5 MW peak, 40 KW average. Two filters are used for this application. The signal is divided, passed through both balanced filters and then recombined at the output. High conductivity



aluminum alloy material helps lower the insertion loss (typically 0.2 dB). The low loss, high precision machining, and high efficiency cooling fins all aid in achieving a temperature rise is less than 70° F above ambient at 35 KW average input power. All above factors contribute towards problem free operation at the extremely high power levels.

This filter is machined and brazed using a carefully controlled process. Its rugged construction makes it suitable for extreme shipboard environments. This field proven design has been operational for many years, failure free, in numerous installations.

Contact MEC with your specific requirements. Our engineering staff will be glad to discuss your high power filter needs.

## SPECIFICATIONS:

<b>Model Number</b>	<b>S70L-345</b>
<b>Frequency</b>	<b>2.9-3.1 GHz</b>
<b>Peak Power</b>	<b>5 MW</b>
<b>Average Power</b>	<b>40 KW</b>
<b>VSWR</b>	<b>1.2:1 Max</b>
<b>Insertion Loss</b>	<b>0.3 dB Max, (0.2 dB Typ)</b>
<b>Stop Band Frequency</b>	<b>3.7-4.2 GHz</b>
<b>Rejection</b>	<b>60 dB Min, (80 dB Typ)</b>
<b>Case Temperature</b>	<b>70° Max above ambient @35 KW average power</b>
<b>Pressure</b>	<b>37.5 PSIG Max</b>
<b>Input/Output Ports</b>	<b>WR284</b>
<b>Weight</b>	

