MODEL NUMBER: PA40G

DESCRIPTION:
Model PA40G is a broadband benchtop low noise amplifier with a typical small signal gain of 40 dB and a nominal noise figure of 3 dB across the frequency range of 18 to 40 GHz. The power supply required is a single phase AC voltage in the range of 100 to 240 VAC, which can be supplied by a wall outlet. The LED light helps to indicate the working status of the amplifier. The input and output port configurations are female K connectors.

PARAMETER | MINIMUM | TYPICAL | MAXIMUM
--- | --- | --- | ---
Frequency | 18 GHz | 40 dB | 40 GHz
Gain | 3 dB | 5 dB | 7 dB
Noise Figure | 3 dB | 4 dB | 5 dB
P_1dB | +10 dBm | 0 dBm | -20 dBm
RF Input Damage Level | 10 dB | 12 dB | 14 dB
Input Return Loss | 10 dB | 12 dB | 14 dB
Output Return Loss | 10 dB | 12 dB | 14 dB
Power Supply (AC Adapter Provided) | 100 V_ac | 110 V_ac | 220 V_ac
Specification Temperature | +25 °C | +25 °C | +50 °C
Case Temperature | 0 °C | 0 °C | +50 °C

APPLICATIONS:
- Bench Top Power Amplification
- Antenna Range
- Power Boosting

FEATURES:
- Ultra-Broadband Coverage
- Good Gain Flatness

MECHANICAL SPECIFICATIONS:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Port</td>
<td>K(F)</td>
</tr>
<tr>
<td>Output Port</td>
<td>K(F)</td>
</tr>
<tr>
<td>DC Bias Port</td>
<td>2.5 mm DC Jack (AC-to-DC power converter included)</td>
</tr>
<tr>
<td>DC Bias Switch</td>
<td>On-Off Rocker Switch with Indicator Light</td>
</tr>
<tr>
<td>Enclosure Material</td>
<td>Extruded Aluminum</td>
</tr>
<tr>
<td>Finish</td>
<td>Black Anodized</td>
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<tr>
<td>Weight</td>
<td>1.5 lbs</td>
</tr>
<tr>
<td>Size</td>
<td>3.22” (W) x 4.12” (L) x 1.74” (H)</td>
</tr>
<tr>
<td>Outline</td>
<td>TB-SC</td>
</tr>
</tbody>
</table>
TYPICAL GAIN AND RETURN LOSS VS. FREQUENCY

BIAS: +8 $V_{dc}/200$ MA

Gain (dB)

Input Return Loss

Output Return Loss

RETURN LOSS (dB)

Frequency (GHz)

TYPICAL NOISE FIGURE VS. FREQUENCY

BIAS: +8 $V_{dc}/200$ MA

Noise Figure (dB)

Frequency (GHz)
TYPICAL OUTPUT POWER VS. FREQUENCY
BIAS: +8 V<sub>dc</sub>/200 MA

MECHANICAL OUTLINE: (UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES [MILLIMETERS])