Power Amplifier - 50 watts
Model QBS-563 (1710 - 1880 MHz)

Description
The QBS-563 is class AB amplifier with a narrow band frequency range of 1710 to 1880 MHz. Operating over a DC input voltage of +28 Vdc, the QBS-563 provides 34 dB small signal gain. Output power of +44 dBm is provided over the 1710 to 1880 MHz frequency band. Typical current drawn from a +28 V supply at +44 dBm output power is 3000 mA.

Features
- High Output: 50 watts
- Class AB Design
- Ultra High Efficiency...up to 50%
- Gain: 34 dB
- Supply: +28 volts
- Impedance: 50 ohms

Added Features
- Internal Voltage Regulator: Supplies from+28 to +32 volts
- Thermal Temperature Compensating Circuits
- High Input Protection Circuitry
- Built-in Fault Monitoring
- Built-in User Control Interfaces
- Harmonic Filters

Typical Specifications
- Frequency: 1710 to 1880 MHz
- Output Power: +44 dBm
- Saturated Output Power: +51 dBm (over band)
- Small Signal Gain: 34 dB
- Gain Flatness: +/- 1 dB
- IP3: +56 dBm
- Reverse Isolation: 50 dB
- Impedance: 50 ohms
- DC Power: +28 V / 3000 mA
- Temp Range: -40°C to +85°C

All specifications above typical, measured at 25°C

Dimensions and Connections
- 8.0” L x 3.5” W x 1.29” H
- Hermetically sealed housing, available with field replaceable SMA connectors, or gold plated pins for through board mount.

Maximum Ratings
- Operating Temperature: -55°C to +100°C
- Storage Temperature: -62°C to +125°C
- DC Voltage at 25°C: +34 volts
- Input Drive at 25°C: +28 dBm
Power Amplifier - 50 watts

Control Logic

Outline Drawing

7W2 CONNECTOR PINOUT

<table>
<thead>
<tr>
<th>Pin Number</th>
<th>SIGNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>+28 VDC</td>
</tr>
<tr>
<td>A2</td>
<td>+28 VDC RETURN</td>
</tr>
<tr>
<td>1</td>
<td>BLANK +</td>
</tr>
<tr>
<td>2</td>
<td>B (+)</td>
</tr>
<tr>
<td>3</td>
<td>BLANK -</td>
</tr>
<tr>
<td>4</td>
<td>RTN/SHIELD</td>
</tr>
<tr>
<td>5</td>
<td>A (-)</td>
</tr>
</tbody>
</table>

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