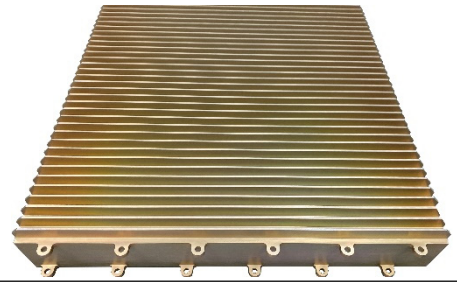




# JA900010000P45; 9 – 10 GHz 30W AMPLIFIER

- Solid-state Class AB design
- Suitable for Pulsed Waveforms
- High reliability and ruggedness
- Forward/Reflected Power & Temp. Monitoring (Optional)
- Open/Short Load Full Protection
- Fast Switching Capability



## ELECTRICAL & ENVIRONMENTAL SPECIFICATIONS

<b>Frequency:</b>	9000 - 10000 MHz
<b>Output Power:</b>	30W typ. pulsed (10% duty, 10µs width)
<b>Nominal Gain:</b>	45 dB
<b>Gain Flatness:</b>	± 1 dB (Large Signal)
<b>Input VSWR:</b>	2:1 max.
<b>Load VSWR Survival:</b>	∞:1 max.
<b>Spurious / 2<sup>nd</sup>&amp;3<sup>rd</sup> Harm:</b>	< -60 dBc / < -15 & -20 dBc
<b>DC Supply Voltage:</b>	28 VDC
<b>DC Power:</b>	< 140W avg.
<b>Enable Speed:</b>	4 µs max.
<b>Operating Case Temp.:</b>	-40 °C to 71 °C
<b>Storage Temperature:</b>	-40 °C to 85 °C
<b>Shock:</b>	MIL-STD-810F/G
<b>Vibration:</b>	MIL-STD-810F/G

## INTERFACES

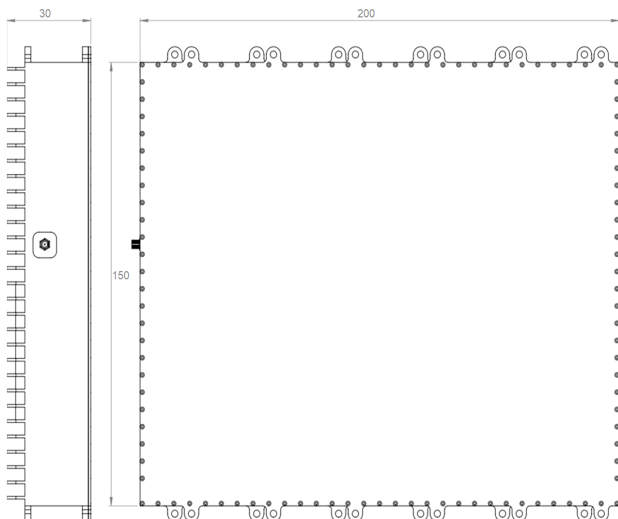
<b>RF Input:</b>	SMA Female
<b>RF Output:</b>	SMA Female
<b>Control:</b>	<ol style="list-style-type: none"> <li>1) GND</li> <li>2) RF Enable</li> <li>3) Forward Power *</li> <li>4) Reverse Power *</li> <li>5) I2C CLK **</li> <li>6) I2C DATA **</li> <li>7) GND</li> <li>8) GND</li> <li>9) GND</li> </ol>
<b>Power:</b>	<ol style="list-style-type: none"> <li>1) DC INPUT</li> <li>2) DC INPUT</li> <li>3) DC RETURN</li> <li>4) DC RETURN</li> </ol>

\* Forward & Reverse power detection (Optional)

\*\* I<sup>2</sup>C is for temperature monitoring (Optional)

## MECHANICAL SPECIFICATIONS

<b>Size (mm) :</b>	150 x 200 x 30
<b>Weight :</b>	2000 gr.
<b>Plating :</b>	Yellow Chromate



## GENERAL DESCRIPTION

RFTR's JA900010000P45 is a reliable 30W power amplifier operating between 9000-10000 MHz and suitable for pulsed waveforms with 10% duty cycle, 10 µs pulse width. This amplifier can be used in different applications in X band. The PA can be enabled/disabled as fast as 4 µs that makes it suitable for power saving during pulsed applications.

JA900010000P45 is designed with the components that do not require any export license.

Harmonic filtering, switching units and forward & reverse power monitoring can be added optionally to the module with an acceptable power degradation. I<sup>2</sup>C interface is also available for temperature monitoring optionally.