



# JA600018000P49; 6 – 18 GHz 80W AMPLIFIER

- Solid-state Class AB design
- Ultrawide-band Operation
- GaN on SiC Transistors
- High reliability and ruggedness
- Forward/Reflected Power Monitorings
- Fast Switching Capability

## ELECTRICAL & ENVIRONMENTAL SPECIFICATIONS

|   |   |
|---|---|
| <b>Frequency:</b>   | 6000-18000 MHz                                |
| <b>Output Power:</b>                                      | 80 W typ. 75 W min.                           |
| <b>RF input for Rated Output:</b>                         | 0 dBm typ.                                    |
| <b>Nominal Gain (@ SS input):</b>                         | 60 ± 5 dB typ.                                |
| <b>Input VSWR:</b>  | 2:1 max.                                      |
| <b>Maximum Input Power:</b>                               | +10 dBm                                       |
| <b>Spurious / 2<sup>nd</sup>&amp;3<sup>rd</sup> Harm:</b> | <-60 dBc / < -10&-20 dBc                      |
| <b>DC Supply Voltage:</b>                                 | 28 V  |
| <b>Enable Speed:</b>                                      | 4 µs max.                                     |
| <b>Operating Case Temp.:</b>                              | -40 °C to 65 °C<br>External Heatsink Required |
| <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>   | N Female  |
| <b>9-PIN COMBO:</b> | A1) GND<br>A2) GND<br>A3) 28 V<br>A4) 28V<br>1) Enable<br>2) Alarm<br>3) Temperature (Analog)<br>4) Reverse Power (Analog)<br>5) Forward Power (Analog) |

## MECHANICAL SPECIFICATIONS

|                    |                  |
|--------------------|------------------|
| <b>Size (mm) :</b> | 203 × 152 × 63.5 |
| <b>(inch) :</b>    | 8 × 6 × 2.5      |
| <b>Weight :</b>    | 2500 gr.         |
| <b>Plating :</b>   | Yellow Chromate  |

## GENERAL DESCRIPTION

RFTR's JA600018000P49 is a reliable ultrawide-band 80W power amplifier operating between 6000 - 18000 MHz and suitable for CW or Pulsed waveforms. This amplifier can be used in different applications such as radars, datalinks, mobile jamming or UAVs in C, X and Ku bands. JA600018000P49 offers forward-reverse power monitoring. The PA can be enabled/disabled as fast as 4 µs that makes it suitable for power saving during pulsed applications.

JA600018000P49 is designed with the components that do not require any export license.