

# YSPA25-R1-18-S

0.1-18 GHz Power Amplifier, 25 dB Gain, SMA

## Key Features

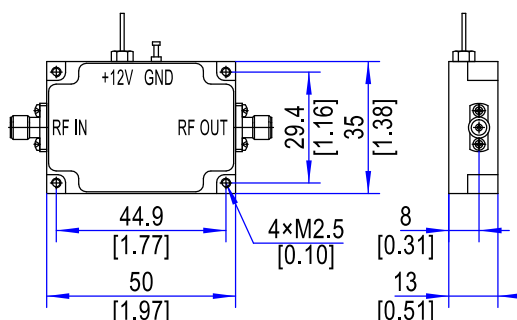
- Broadband 0.1–18 GHz coverage
- 30 dBm Psat
- Low spurious emissions
- High reliability for continuous operation
- Compact module with +12 V supply

## Applications

- Broadband communication systems
- Radar transmitter subsystems
- RF test and measurement
- Electronic warfare (EW)
- Microwave research laboratories

| Electrical Specifications                                                                  |                                 |
|--------------------------------------------------------------------------------------------|---------------------------------|
| Parameter                                                                                  | Specification                   |
| Frequency Range                                                                            | 0.1-18 GHz                      |
| Gain                                                                                       | ≥25 dB                          |
| Gain Flatness                                                                              | ≤±1.5 dB                        |
| P1dB                                                                                       | ≥27 dBm                         |
| Output Psat                                                                                | ≥30 dBm                         |
| OIP3                                                                                       | ≥35 dBm                         |
| Noise Figure                                                                               | ≤5.0 dB                         |
| Max Input Power (Linear Operation)                                                         | ≤+2 dBm                         |
| Harmonic Suppression                                                                       | ≤-10 dBc (Tyc.)                 |
| Spurious Suppression                                                                       | ≤-60 dBc                        |
| Input VSWR                                                                                 | ≤2.0:1                          |
| Drain Supply (Vd)                                                                          | +12 V                           |
| Supply Current                                                                             | 0.8 A                           |
| Environmental Specifications                                                               |                                 |
| Operating Temperature                                                                      | -40°C to 60°C                   |
| Storage Temperature                                                                        | -50°C to 85°C                   |
| Cooling Method                                                                             | External heatsink required      |
| ※ This product is not hermetically sealed and is NOT waterproof, fog-proof, or dust-proof. |                                 |
| Mechanical Specifications                                                                  |                                 |
| Connectors                                                                                 | SMA Female                      |
| Power Supply Interface                                                                     | Feedthrough Capacitor           |
| Dimensions <sup>1</sup>                                                                    | 50×35×13 mm [1.97×1.38×0.51 in] |

## Outline Drawing (Units: mm/[inch], Tolerance: ±0.3mm)



Note 1: Excluding Connectors