



# Description

The **VWA-0000699-AA** is a 3 Stages analog High Power Surface Mount Package amplifier operating in the frequency range 8 to 12 GHz.

The SMD package includes a cascaded 3 stages amplifier designed in  $0.25\mu m$  pHEMT process, and its decoupling circuit interfaces.

The device is capable of +40 dBm output power at Psat, and provides 25 dB of large signal gain from 8 to 12 GHz with less than 1 dB of Gain variation. The package has been optimized to provide high efficiency, supply current is 4.5A with Vd=+8.5V, when delivering +40dBm output power, in pulse mode.

GDSII file is available for mechanical design. Evaluation board available on request

## **Mechanical Dimensions**

#### VWA-0000699-AA

8 to 12 GHz – 25 dB – 10W SMD High Power Amplifier

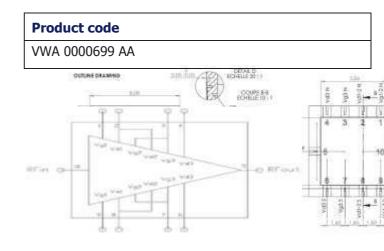
#### **Features**

- 3 stages High Power pHEMT GaAs Amplifier
- Small Surface Mount Package Device
- Wide band : 8 to 12 GHz
- High Output Psat : +40 dBm
- Large signal gain : 25 dB
- 50Ω, AC coupled RF input and output,
- Power supply: 4.5A @ +8.5 V; Vg= -0.7V
- 8 x 8 x 2 mm

### **Applications**

- X band High Power amplifier
- Broadband communication
- Radar
- Test and measurement

# **Ordering information**



### **Functional Block Diagram**

This product is sensitive to electrostatic discharge and should not be handled except at a static free workstation. Take precautions to prevent ESD; use wrist straps, grounded work surfaces and recognized anti-static techniques when handling the **VWA-0000699-AA SMD** device.

