

# AS0760-5/5

## 0.7 - 6.0 GHz 5/5 Watt Dual Band Class A Solid State Amplifier





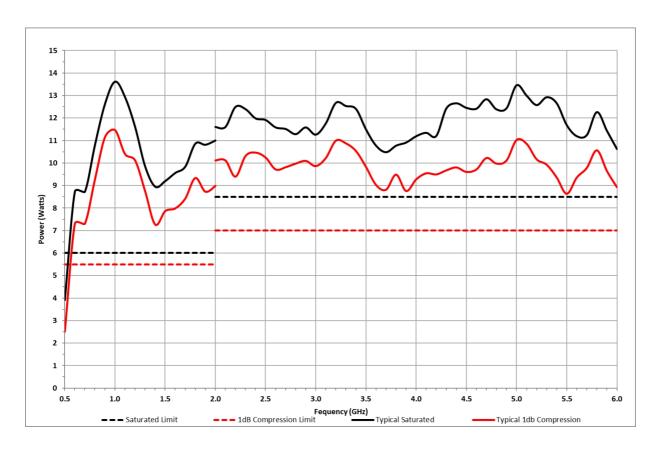
### MAIN FEATURES

- Class A Operation
- 100% Mismatch Tolerant with no Foldback
- Calibrated Dual Directional Coupler
- Ethernet, USB, RS232 & GPIB Interface
- 5 Year Warranty

The AS0760 series of solid-state power amplifiers follows the MILMEGA tradition for compact, upgradeable microwave power amplifier solutions with field proven reliability. A modular design enables easy in country service, maintenance and factory upgrades to higher power models.

Developed to cover the frequency band 0.7 - 6 GHz this GaAs based amplifier produces high P1dB performance with excellent linearity and low harmonics making this series ideal for multiple applications including various EMC standards, Telecoms and Instrumentation testing.

Powered from a switched mode power supply for high efficiency, high power factor and wide voltage range operation. The unit is air-cooled with integral fans and is protected against faulty cooling by excess temperature sensing. A safety interlock connector is provided, which the user can short circuit to ground, to put the amplifier into standby mode. Front panel indicators are provided to indicate over-temperature and RF interlock condition.







# **RF Specifications**

| Frequency Bands                      | Dual Band                        |
|--------------------------------------|----------------------------------|
| Frequency (min.) GHz                 | 0.7 GHz                          |
| Frequency (max.) GHz                 | 6 GHz                            |
| Modulation Formats                   | AM, FM, Pulse                    |
| RF Sample Port Coupling Factor (nom) | 36 dB                            |
| Maximum Input Power (no damage)      | 10 dBm                           |
| Output VSWR Tolerance                | Infinite any phase (no foldback) |
| Stability                            | Unconditional                    |
| Output Impedance                     | 50 Ohm                           |
| Input VSWR                           | 2:1 (max)                        |
| Output VSWR                          | 2:1 (typical)                    |
| Spurious (min.)                      | -70 dBc                          |

### Band 1

| Frequency (min.) GHz Band 1      | 0.7 GHz      |
|----------------------------------|--------------|
| Frequency (max.) GHz Band 1      | 2 GHz        |
| Psat (min.) Band 1               | 6 W          |
| P1dB (min.) Band 1               | 5.5 W        |
| Gain (min.) Band 1               | 34 dB        |
| Gain Variation (max) Band 1      | +/- 2.0      |
| Harmonics @ P1dB Band 1          | -20 dBc      |
| 3rd Order Intercept Point Band 1 | 10 db > P1dB |
| Noise Figure Band 1              | 6 dB         |



### Band 2

| Frequency (min.) Band 2          | 1.8 GHz      |
|----------------------------------|--------------|
| Frequency (max.) Band 2          | 6 GHz        |
| Psat (min.) Band 2               | 8.5 W        |
| P1dB (min.) Band 2               | 7 W          |
| Gain (min.) Band 2               | 35 dB        |
| Gain Variation (max) Band 2      | +/- 3.0      |
| Harmonics @ P1dB Band 2          | -20 dBc      |
| 3rd Order Intercept Point Band 2 | 10 db > P1dB |
| Noise Figure Band 2              | 8 dB         |



### **Mechanical Specifications**

| Safety Interlock           | Via rear panel mounted BR2-female |
|----------------------------|-----------------------------------|
| Supply Voltage             | 90 to 264 VAC                     |
| Supply Frequency           | 47 to 63                          |
| Supply Power (typ.) Band 1 | 0.1 kVA                           |
| Supply Power (typ.) Band 2 | 0.1 kVA                           |
| RF Input Connector         | Type N female                     |
| RF Output Connector        | Type N female                     |
| RF Sample Port Connectors  | Type N female                     |
| Com. Interface             | RS232, Ethernet & USB             |
| Dimensions                 | 19 inch, 3U, 527mm (WxHxD)        |
| Weight kg                  | 10 kg                             |



# **Available Product Configurations**

| Product        | Configuration             | Item #   |
|----------------|---------------------------|----------|
| AS0760-5-5-001 | Front Panel RF Connectors | 3-342288 |
| AS0760-5-5-002 | Rear Panel RF Connectors  | 3-342289 |

