

## AS0840-100/55

### 0.8 - 4.0 GHz 100/55 Watt Dual Band Class A Solid State Amplifier



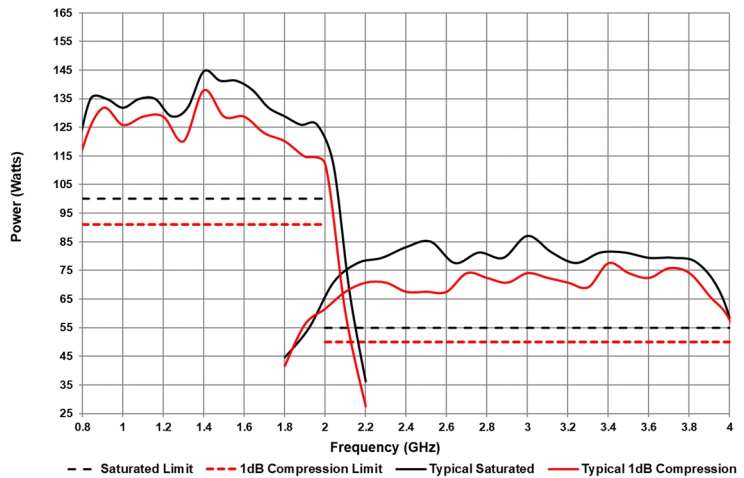
The AS0840 series of solid-state power amplifiers follows the MILMEGA tradition for compact, upgradeable microwave power amplifier solutions with field proven reliability. A modular design enables easy in country service, maintenance and factory upgrades to higher power models.

Developed to cover the frequency band 0.8 - 4 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.

#### MAIN FEATURES

- Class A Operation
- 100% Mismatch tolerant and unconditionally stable (no foldback)
- Calibrated Dual Directional Coupler fitted as standard
- Ethernet, USB, RS232 & GPIB fitted as standard
- 5-year parts and labour warranty.



**RF Specifications**

Frequency Bands	Dual Band
Frequency (min.) GHz	0.8 GHz
Frequency (max.) GHz	4 GHz
Modulation Formats	AM, FM, Pulse
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.) Band 1	0.8 GHz
Frequency (max.) Band 1	2 GHz
Psat (min.) Band 1	100 W
P1dB (max.) Band 1	91 W
Gain (min.) Band 1	46 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	2 GHz
Frequency (max.) Band 2	4 GHz
Psat (min.) Band 2	55 W
P1dB (max.) Band 2	50 W
Gain (min.) Band 2	43 dB
Gain Variation (max) Band 2	+/- 2.5
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 Hz
Supply Power (typ.) Band 1	0.64 kVA
Supply Power (typ.) Band 2	0.64 kVA
RF Input Connector	Type N female
RF Output Connector	Type N Female
Com. Interface	GPIB, RS232, Ethernet & USB
Dimensions mm	19 inh, 3U 527mm Deep (HxWxD)
Weight kg	27 kg

**Available Product Configurations**

Product	Configuration	Item #
0840-100/55	Front Panel RF Connectors, LAN, USB, RS232 Interface	0840-100/55
0840-100/55-10	Rear Panel RF Connectors, LAN, USB, RS232 Interface	0840-100/55-10
0840-100/55-2	Front Panel RF Connectors, GPIB, LAN, USB, RS232 Interface	0840-100/55-2
0840-100/55-2-10	Rear Panel RF Connectors, GPIB, LAN, USB, RS232 Interface	0840-100/55-2-10