

The AB018026G4040AC is a 10W high gain Solid State Broadband High Power Amplifier. This amplifier module utilizes the latest high power RF GaN transistors and also features with protection functions to ensure high quality. This amplifier is suitable for communications, radar, automotive and EMC testing. The amplifier comes with an industry leading warranty.

#### **Features**

18GHz-26.5GHz frequency rangePsat 40dBm type, 39 dBm minPower gain 44dB Type.Built-in control and protection circuits

Solid-state Class AB Broadband design Ultra-broadband Portable High reliability and efficiency

### ELECTRICAL SPECIFICATIONS(T=25°C, Load VSWR ≤ 1.2)

Symbol	Min	Тур	Max	Unit
BW	18		26.5	GHz
Psat	39	40		dBm
Gp		44		dB
ΔGp		±0.5		dB
G <sub>ss</sub>		55		dB
ΔG <sub>ss</sub>		+1.5		dB
$\Delta G_{SS}$		±2.5		dB
Рім		-4	0	dBm
2 <sup>nd</sup>			-20	dBc
Spur			-55	dBc
NF		N/A		dB
VSWR_i			2	N/A
VSWR_o			2	N/A
VAC	100	120	240	V
IDD		2.2		А
	Symbol BW Psat Gp ΔGp ΔGss ΔGss ΔGss PιΝ 2 <sup>nd</sup> Spur NF VSWR_i VSWR_o VSWR_o	SymbolMinBW18Psat39Gp-ΔGp-ΔGss-ΔGss-ΔGss-ΔGss-ΔSpur-Spur-NF-VSWR_i-VSWR_o100IDD-	Symbol         Min         Typ           BW         18         18           Psat         39         40           Gp         44           ΔGp         ±0.5           Gss         55           ΔGss         ±1.5           ΔGss         ±2.5           PIN         -4           2 <sup>nd</sup>	Symbol         Min         Typ         Max           BW         18         26.5           Psat         39         40           Gp         44         44           ΔGp $\pm 0.5$ 55           Gss         55         55           ΔGss $\pm 1.5$ 40           ΔGss $\pm 2.5$ 100           PIN         -4         0           2 <sup>nd</sup> -20         55           NF         N/A         2           VSWR_i         2         2           VAC         100         120         240           IDD         2.2         100         120         240

Note\*: contact sales@eliterf.com for further information.

### **PROTECTION AND WARNING FUNCTION**

Over-current protection Over-temperature protection Over-voltage protection



#### **MECHANICAL SPECIFICATIONS**

Inbuilt Heatsink for cooling Length\* Width\*Height: 19 X 15 X 3.5 inches Weight: 30 lbs RF Connector Input: 2.92, Female RF Connector Output: WR42

# **ENVIRONMENTAL SPECIFICATIONS (Design to Meet)**

Module Operation Temperature*1	<b>-20</b> * <sup>1</sup>	+55	°C
Storage Temperature Range	-50	+70	°C
Relative-Humidity		95	%
Altitude*2	N/A		
Vibration/Shock <sup>*2</sup>	N/A		

**Notes** \*1: Module Operation Temperature can be extended to -40 N+G0 C, Contact Sales for update. **Notes** \*2: Altitude /Vibration are designed with considerations, but without tests and experiments.

# LIMITS

Input RF drive level without damage Load VSWR @ POUT = 10W Thermal Degradation Pin≤0 dBm VSWR≤5:1[Design To Meet] 85°C@ heatsink

# **Typical Data Plots** (Temp: 25C, Load VSWR less than or equal to 1.2)





Elite RF LLC 1700 Tower Dr, Hanover Park, IL 60133, USA Call us for customer service/technical support at: 847-592-6350 Email: sales@eliterf.com Web: www.eliterfllc.com Rev 1: 03/14/2024 Specifications subject to change, consult sales for latest information