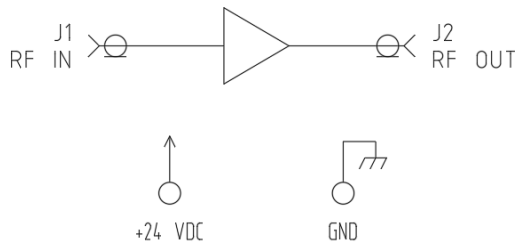


FEATURES

- Technology: GaAs/GaN
- Frequency Range: 420-450 MHz
- Output P_{1dB} Power: 12W Min
- Output P_{SAT} Power: 20W Min
- Small Signal Gain: 36 dB Typical
- S.S. Gain Flatness: ±0.25dB
- Phase Slope Alignment: -135.2° ± 5°
- Low Harmonic: >50dBc (Built-in BPF)
- VSWR Input: 1.5:1
- VSWR Output: 1.7:1
- DC Input: +24V Nominal
- Interface: SMA Input, N Output, Fed Thru
- Output Survivability: ∞ VSWR
- Input Survivability: +30dBm

APPLICATIONS: CW or Pulse High Power Amplifier

FUNCTIONAL BLOCK DIAGRAM

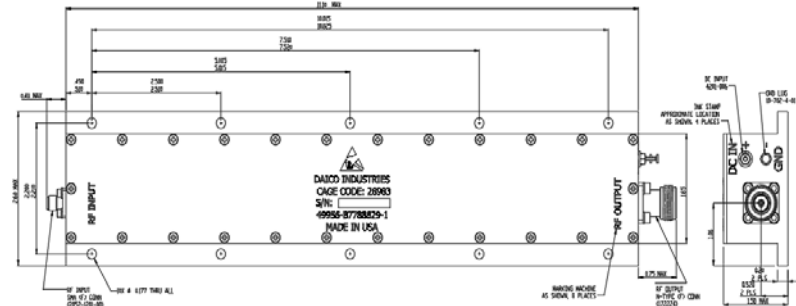


PRODUCT SPECIFICATION

Parameter	Min.	Typ.	Max.	Units	Notes
Frequency	420		450	MHz	
Output P _{1dB} Power	41	42		dBm	
Output P _{SAT} Power	42.5	43		dBm	
Small Signal Gain	34	36	38	dB	
S.S. Gain Flatness		±0.20	±0.25	dB	
Phase Slope Match		±3.0	±5.0	°	Nom. -135.2°
NF		5.0	6.0	dB	
VSWR (Input)		1.5:1	1.7:1		
VSWR (Output)		1.7:1	2.0:1		
Harmonic (2 nd)		-55	-50	dBc	+41dBm Output
Impedance		50		Ω	
Input Power			+30.0	dBm	
DC Voltage	+20	+24	+28	V	
DC Current (+24V)		1.85	2.50	A	CW
Dimensions	11.10"x2.60"x1.50"			inch	
Operating Temp	0	+25	+65	°C	Baseplate

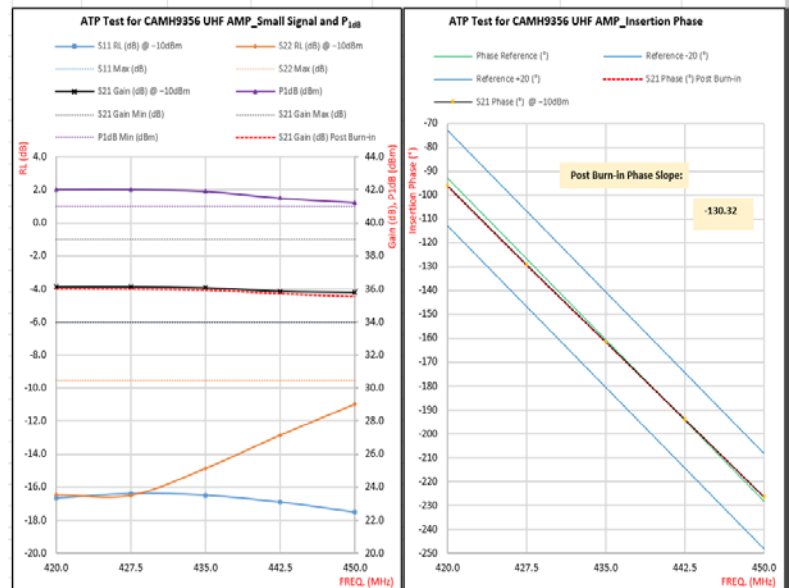


OUTLINE DRAWING



TYPICAL PERFORMANCE

Freq. (MHz)	Prior to Burn-in					Post 168 Hrs Burn-in	
	S11 RL (dB) @ -10dBm	S22 RL (dB) @ -10dBm	S21 Gain (dB) @ -10dBm	S21 Phase (°) @ -10dBm	P _{1dB} (dBm)	S21 Gain (dB) Post Burn-in	S21 Phase (°) Post Burn-in
420.00	-16.66	-16.47	36.13	-96.12	42.00	35.97	-96.23
427.50	-16.40	-16.50	36.13	-129.22	42.00	35.96	-129.39
435.00	-16.49	-14.88	36.07	-161.45	41.90	35.91	-161.63
442.50	-16.90	-12.87	35.86	-193.88	41.50	35.71	-194.05
450.00	-17.49	-11.00	35.80	-226.40	41.24	35.55	-226.55
DC Current	S11 RL (dB):	S22 RL (dB):	Gain Flatness (dB):	Phase Slope (°):	S11 RL (dB):	Burn-in Change (dB):	Phase Slope (°):
6.0A Max	-6.02 dB Max	-9.54 dB Max	± [± 0.25 dB Max]	Δ [-135.21 5° Max]	41.0 dBm Min	Δ [± 0.5 dB Max]	Δ [-135.21 5° Max]
1.845	✓	✓	✓ 0.17	✓ -130.28	✓	✓ -0.16	✓ -130.32



Typical Test Datasheet