

870-880 MHz 25 W CDMA Power Amplifier

General Description

The NA00398 is a 25 W CDMA power amplifier. It is a single biased (+27V) power amplifier that operates between 870 MHz and 880 MHz. The amplifier incorporates internal forward power detection, over power alarm VSWR alarm and over temperature protection circuit.

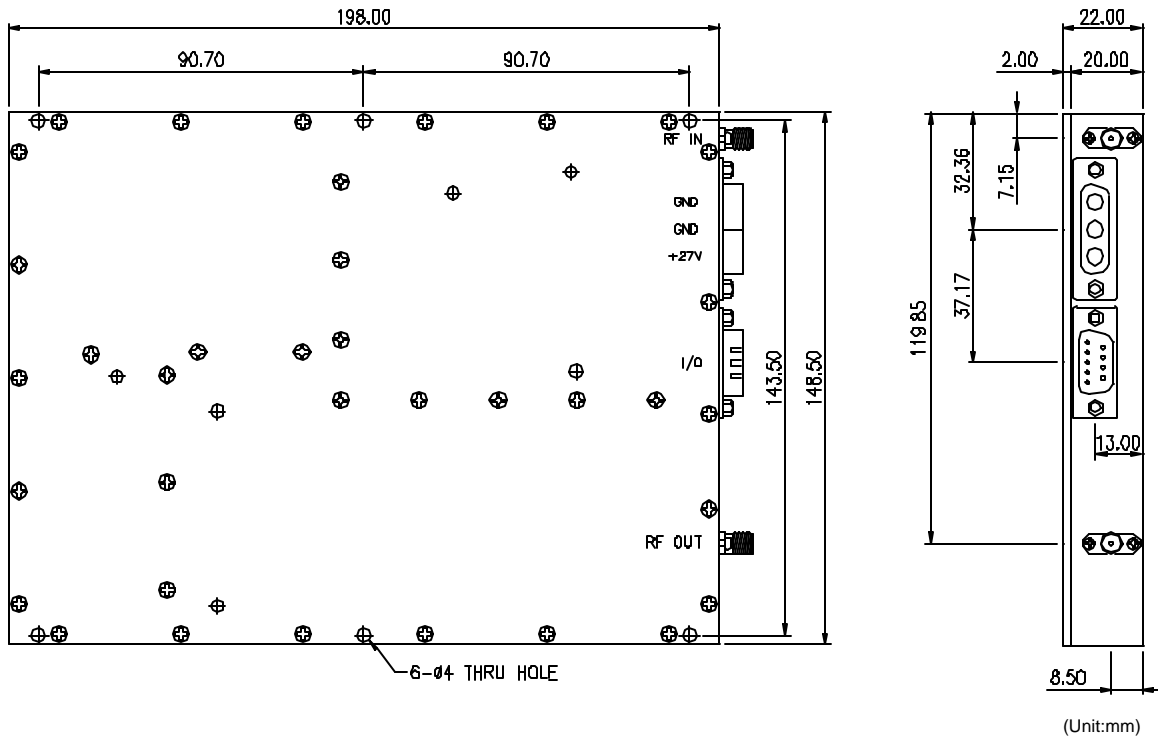
Performance -40 to 60 °C, Vcc = +27 V

Parameter	Min.	Typ.	Max.	Units
Frequency	870		880	MHz
CDMA Average Output Power		25.0		W
Gain	44	45	46	dB
Gain Flatness			± 1.0	dB
Gain Variation Over Temperature			± 1.0	dB
Noise Figure			10	dB
Output 3 rd Order Intercept Point at 39 dBm/tone output		66		dBm
Spurious Emission	± 750.0 kHz ¹		-29	dBc
	± 1.98 MHz ¹		-49	dBc
Input VSWR			1.4 : 1	
Output VSWR			1.3 : 1	
DC supply voltage (Vcc)		+27		V
Current			5.5	A
Operating Temperature (Ambient)	-40		60	°C

¹Resolution bandwidth of equipment is 30 kHz.

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Outline Drawing



Customized Designs: For custom designs, including both electrical and mechanical, please contact us at sales@nextec-rf.com.

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Connector Description

Name	Description
RFIN	(I) RF input signal (SMA-F)
RFOUT	(O) RF output signal (SMA-F)
DC Input	D-Sub Solder Type 3W3P
	1: (I) + 27 V DC 2: Ground 3: Ground
I/O	D-Sub 9 Pin
	1: (O,H) Over Power Alarm @ 45 ± 1 dBm CDMA Average Power Output 2: (O,H) Over Temperature Alarm @ 80 ± 5 °C 3: N.C. 4: (O,H) VSWR Alarm when reverse power at output port is over 36 ± 1 dBm CDMA average power. 5: (O) Forward Power Monitor. Measured Range 22 to 42 dBm output power 3.5 V output @ 42 dBm CDMA average power 6: (O, H) Alarm Active (Active when any of alarms is active.) 7: (I, H) Turn off the Amplifier 8: Ground 9: Ground

(I: Input, O: Output, H: High Active, L: Low Active)

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