nextec-RF

NA00423

824-849 MHz 5 W Linearized Power Amplifier

General Description

The NA00423 is 5W linearized power amplifier operating in 824 to 849 MHz frequency range. It includes a linearization circuit inside to improve its linearity performance. All stage devices can be monitored through over-current alarm monitoring port. The amplifier is available with a adequate heat-sink. Both input and output RF connectors are SMA-F connector. The amplifier can be used for cellular repeater or base station system. It operates over a temperature range of 0 to +80 ^{0}C.

Performance in 25 ^{0}C (Ambient)

Parameter	Min.	Typ.	Max.	Units
Frequency	824		849	MHz
Gain	31	32		dB
Gain Flatness			+/-0.5	dB
Noise Figure		5	7	dB
Output Power at 1 dB Compression	38		-	dBm
Third Order Intercept Point at 27 dBm/output tone	52	55		dBm
Input VSWR		1.3:1	1.5:1	
Output VSWR		1.1:1	1.5:1	
DC Input	+22	+24	+30	V
DC Current			2	A

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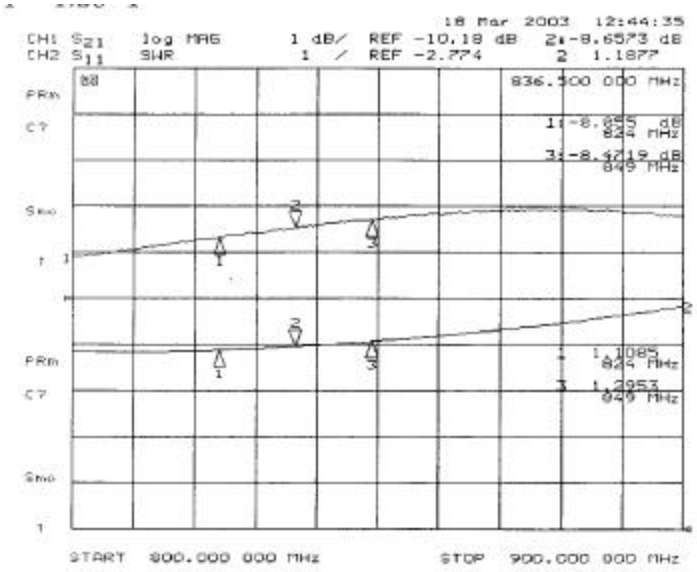
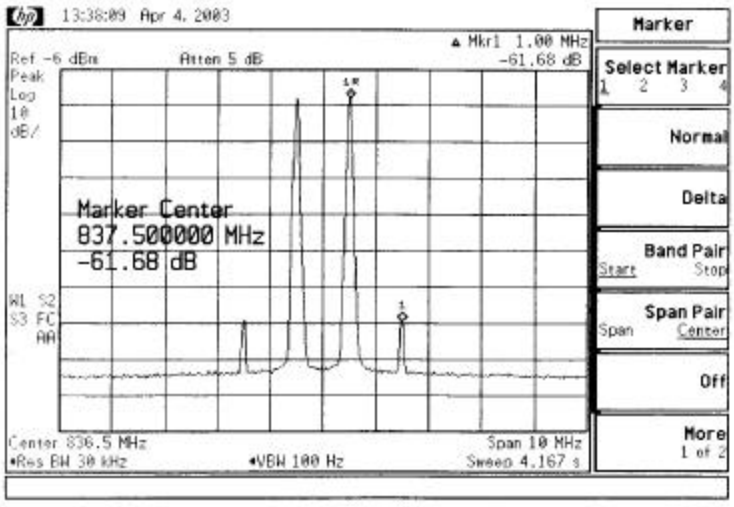
Typical Test Data

Gain and Return Loss in 25 ^{0}C



Output IP$_3$ at 27 dBm/output tone in 25 ^{0}C



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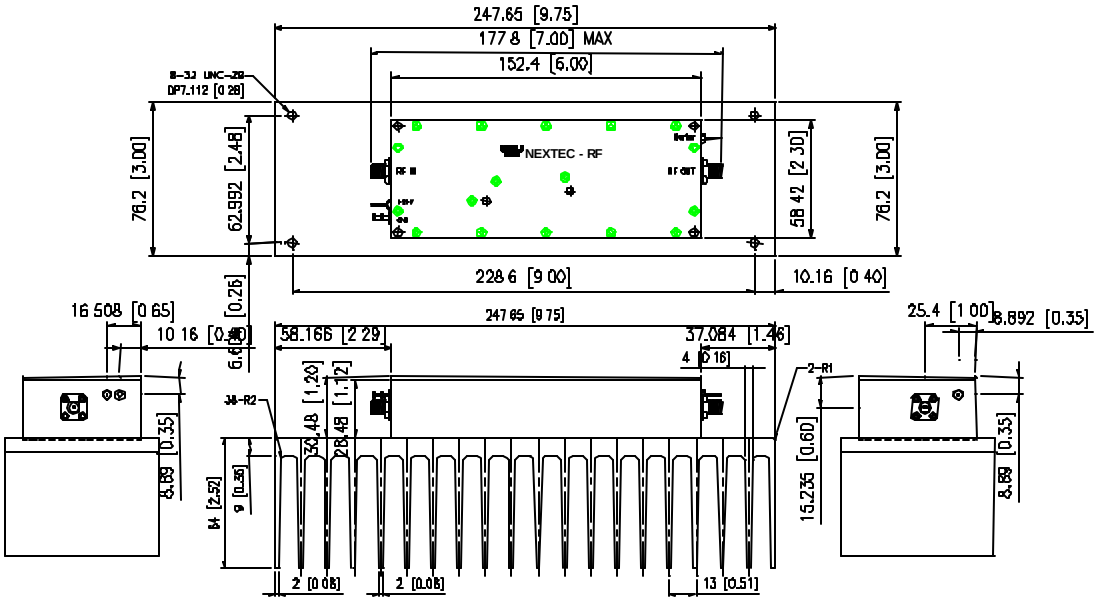
Outline Drawing



(unit: inch)

Connector Description

Name	Description
RFIN	(I) RF input signal (SMA-F)
RFOUT	(O) RF output signal (SMA-F)
+VCC	(I) DC Input +22V to +30 V
GND	Ground
MONITOR	(OH) Over current alarm. Active if one of active devices spent abnormal amount of current.

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