

1840-1870 MHz 16 W Multicarrier (3FA)
CDMA Power Amplifier

General Description

The NA00259 is a 16 W Multicarrier (3FA) CDMA power amplifier. It is a single biased (+27 V) power amplifier that operates between 1840 MHz and 1870 MHz. The amplifier incorporates internal forward power detection, VSWR alarm circuit and over temperature protection circuit.

Performance -20 to 60 °C, Vcc = +27 V

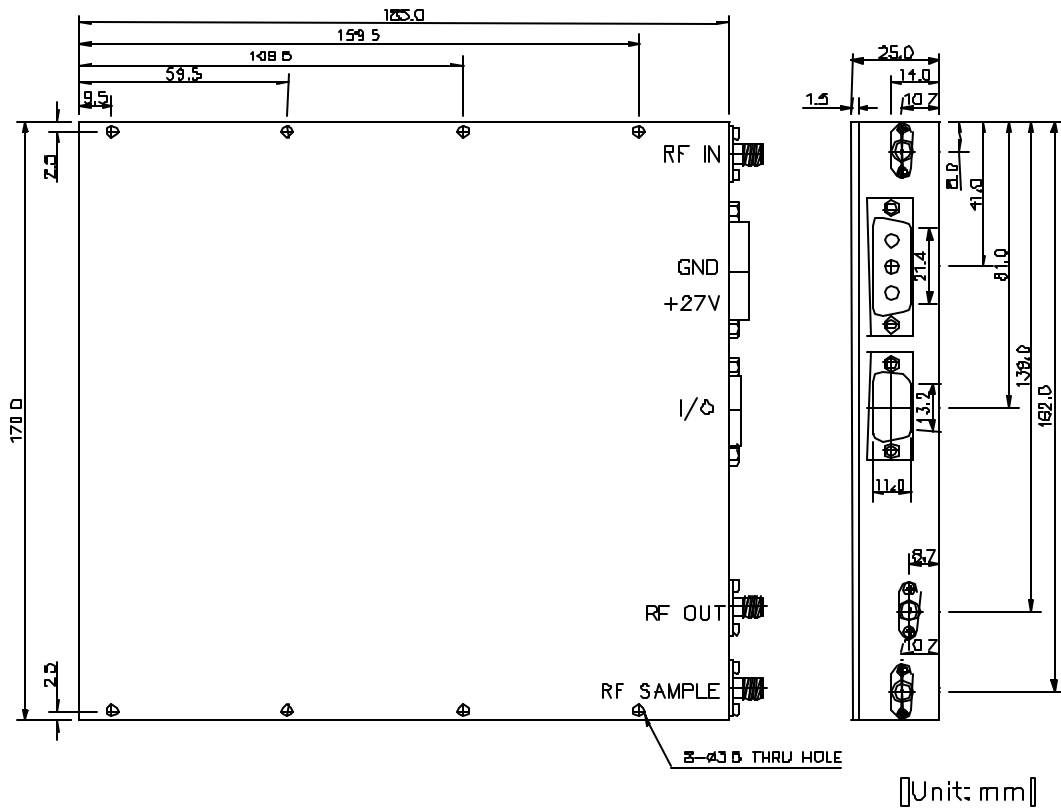
Parameter	Min.	Typ.	Max.	Units
Frequency	1840		1870	MHz
CDMA Average Output Power (3FA)		20.0		W
Gain	49	50	51	dB
Gain Flatness			± 0.5	dB
Gain Variation Over Temperature			± 1.0	dB
Spurious Emission at 3 FA 20 W CDMA Average Power Output ¹	± 885.0 kHz		-42	dBc
	± 1.98 MHz		-42	dBc
Input VSWR			1.5 : 1	
Output VSWR			1.5 : 1	
DC supply voltage (Vcc)		+27		V
Current			7	A
Operating Temperature (Ambient)	-20		60	°C

¹Resolution bandwidth of equipment is 30 kHz.

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

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Outline Drawing



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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
Control Interface	D-Sub 9 Pin
	1: Ground 2: (O,H) Over Power Alarm @ 45 ± 1 dBm CDMA Average Power Output 3: (O,H) VSWR Alarm Active when reverse power at output port is over 36 ± 1 dBm CDMA average power. 4: Not Connected 5: (O,H) Over Temperature Alarm at over 90 ± 5 °C. After the alarm is active, it will be inactive when the temperature becomes at lower than 70 ± 5 °C. The amplifier will automatically shut down if alarm is active. 6: (I, H) Turn off the Amplifier 7: Not Connected. 8: (O) Forward Power Detection Output. Detected Power Range: 20 dBm (0.8 V out) to 42 dBm (4.2 V out) 9: Ground

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

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