

REPLACEMENT PART REFERENCE GUIDE, PMA2-162LN+

AN-60-111

Original Part:	PMA2-162LN+	
Replacement Part:	PMA2-162LNA+	

Replacement Part has been judged by Mini-Circuits Engineering as a suitable replacement to Original Part.

MECHANICAL DIMENSIONS

Case Style: MC1631-1
The PMA2-162LNA+ uses the MC1631-1 case style while the PMA2-162LN+ uses the MC1631 case style.

CONCLUSION:

1) **FORM-FIT-FUNCTIONAL ANALYSIS_a**:

The Replacement Part has a slightly higher maximum package height of 1mm versus the Original Part’s maximum package height of 0.55mm.

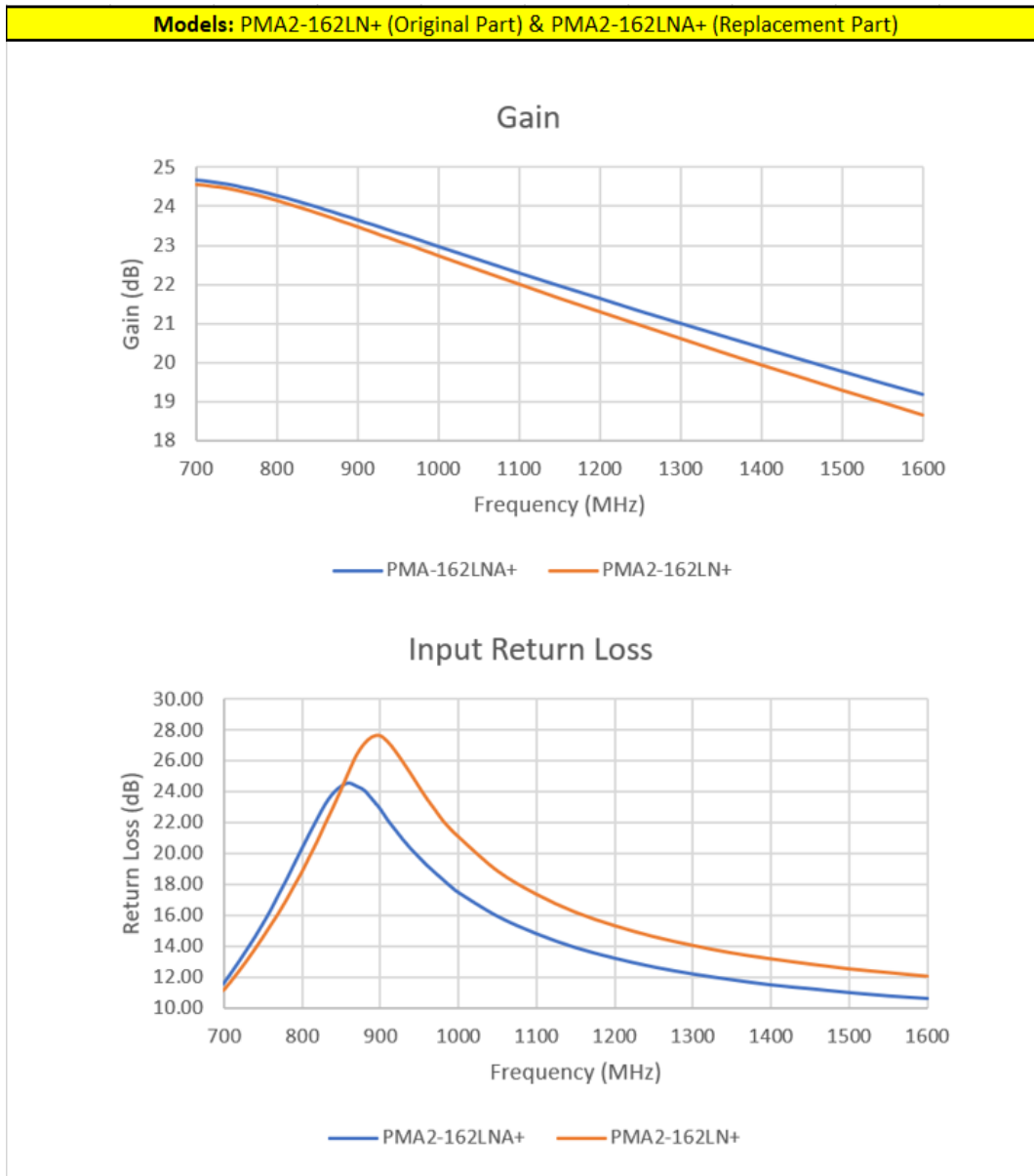
Replacement Part and Original Part feature the same expected performance. See section 2 for typical performance and graphs.

2) TYPICAL PERFORMANCE COMPARISON AT ROOM TEMPERATURE:

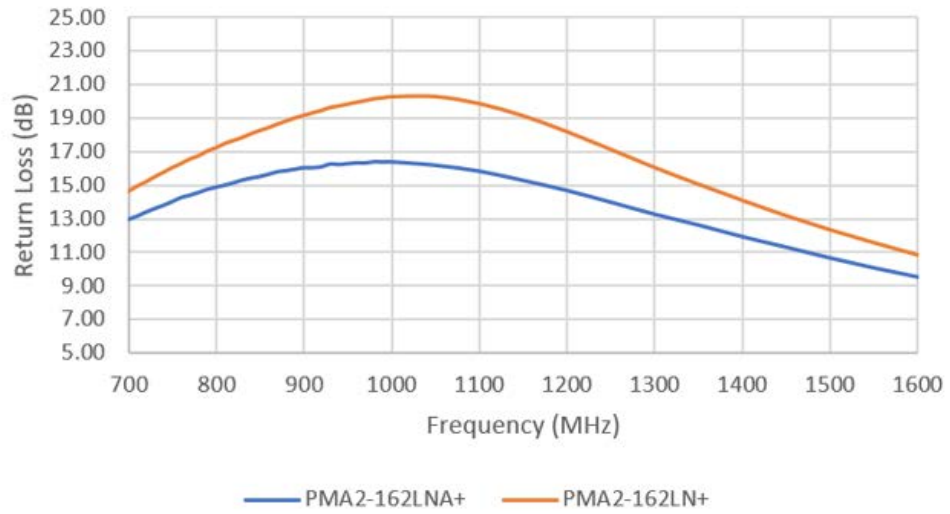
MODEL: PMA2-162LN+, PMA2-162LNA+ (RF Parameters)

Parameter	Freq (MHz)		1 Unit PMA2-162LNA+	1 Unit PMA2-162LN+
	From	To	Typical	Typical
INPUT RETURN LOSS(dB)	700	700	11.6	11.2
	800	800	20.3	18.8
	1000	1000	17.5	21.1
	1300	1300	12.2	14.1
	1600	1600	10.6	12.1
OUTPUT RETURN LOSS(dB)	700	700	13.0	14.7
	800	800	14.9	17.3
	1000	1000	16.4	20.3
	1300	1300	13.3	16.1
	1600	1600	9.5	10.9
GAIN (dB)	700	700	24.6	24.7
	800	800	24.2	24.3
	1000	1000	22.7	23.0
	1300	1300	20.6	21.0
	1600	1600	18.6	19.2
P1dB(dBm)	700	700	19.1	19.3
	800	800	19.5	19.8
	1000	1000	20.1	19.6
	1300	1300	19.5	19.6
	1600	1600	18.3	18.3
OIP3(dBm)	700	700	29.4	28.4
	800	800	30.4	30.4
	1000	1000	30.8	30.8
	1300	1300	29.7	30.1
	1600	1600	29.7	29.3
NOISE FIGURE(dB)	700	700	0.5	1.4
	800	800	0.5	0.9
	1000	1000	0.4	0.6
	1300	1300	0.5	0.5
	1600	1600	0.6	0.7

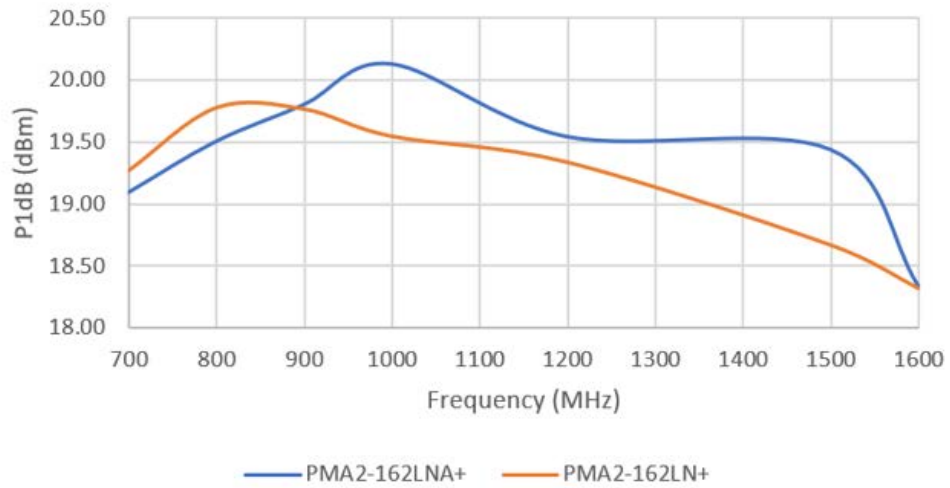
3) TYPICAL PERFORMANCE GRAPHS AT ROOM TEMPERATURE:



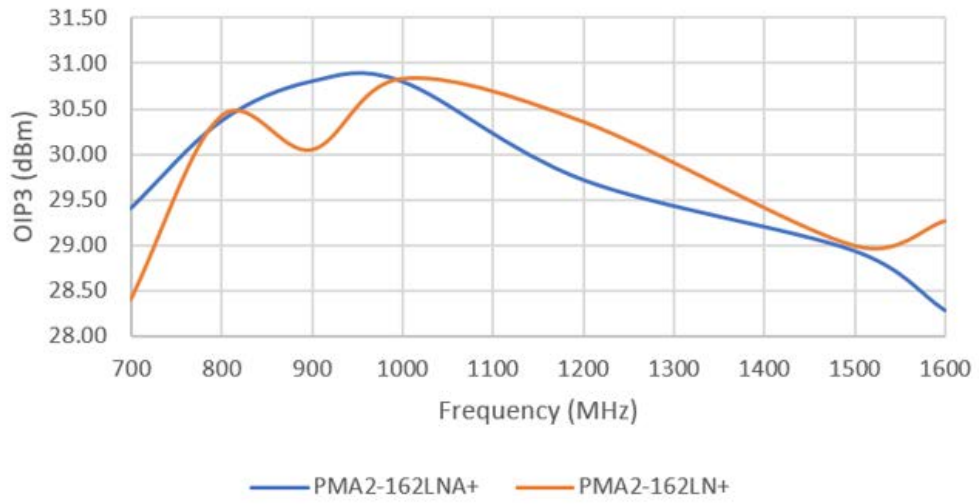
Output Return Loss



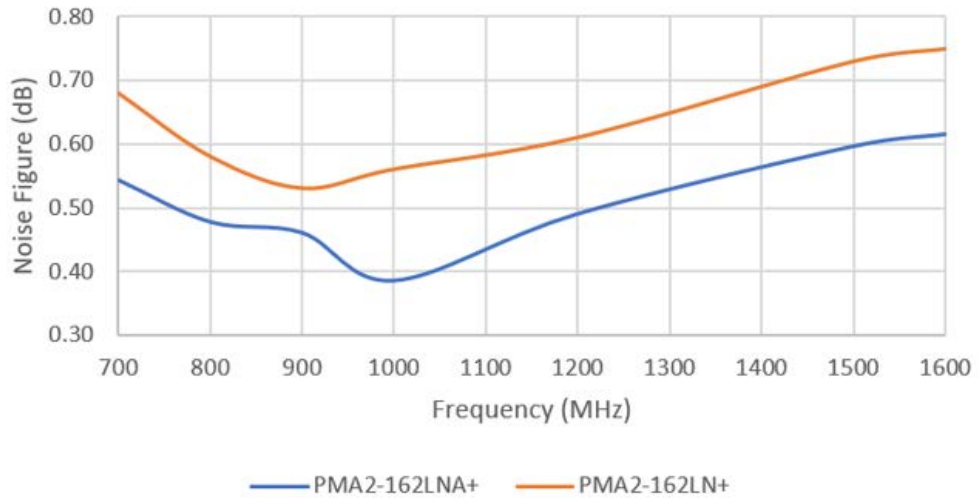
P1dB



OIP3



Noise Figure





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