

ZHL-1042J+ PCN Report

AN-60-070

As a result of the introduction of assembly option at an alternate qualified Mini-Circuits facility, the replacement part has been judged by the Mini-Circuits Engineering team as a suitable replacement for the existing ZHL-1042J+.

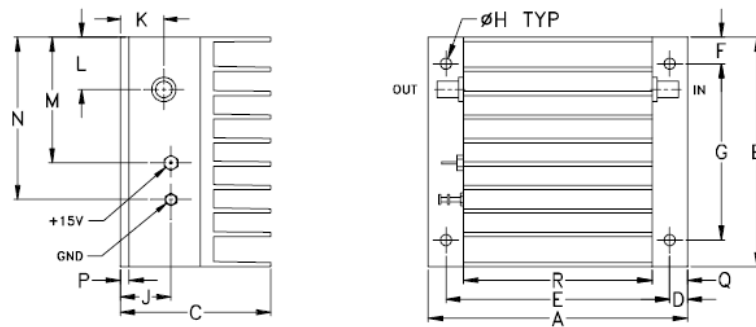
CASE STYLE

ORIGINAL PART: ZHL-1042J+	REPLACEMENT PART: ZHL-1042J+
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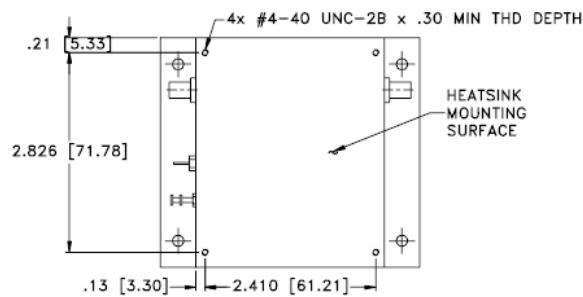
CASE STYLE: NN92, No change



Outline Drawing for models with heatsink



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Outline Dimensions (inches/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	wt
3.66	3.25	2.13	.25	3.16	.38	2.50	.156	.72	.64	.74	1.78	2.30	.125	.50	2.66	grams*
92.96	82.55	54.10	6.35	80.26	9.65	63.50	3.96	18.29	16.26	18.80	45.21	58.42	3.18	12.70	67.56	500.0
																*362 grams without heatsink

- Suitability within a particular system must be determined by and is solely the responsibility of the customer based on, among other things, electrical performance criteria, stimulus conditions, application, compatibility with other components and environmental conditions and stresses.

CONCLUSION:

- 1) No change in FIT and FORM
- 2) Functional changes as follows:

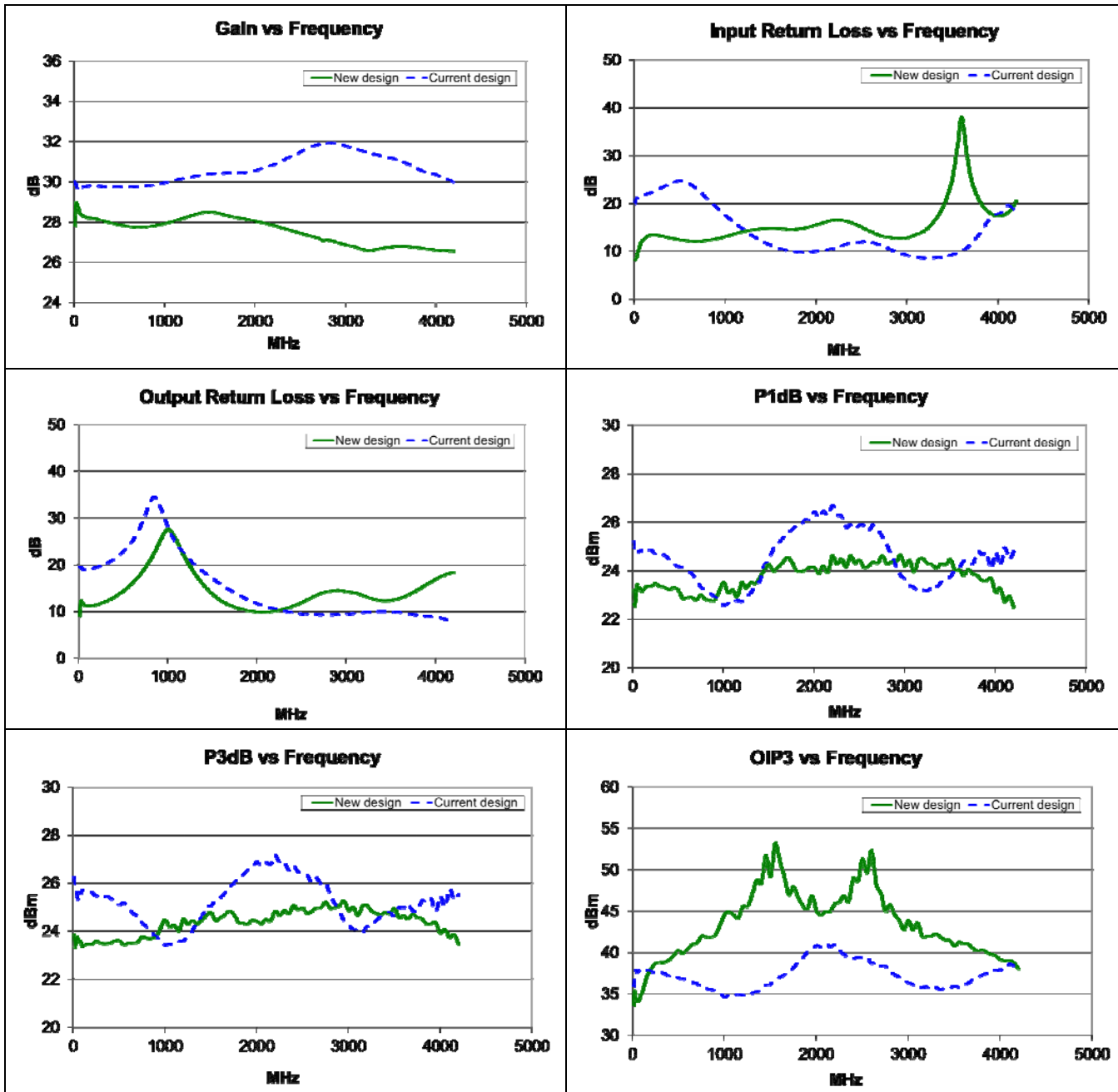
Parameter	Original Part, ZHL-1042J+	Replacement Part, ZHL-1042J+
Gain	25dB min	24dB min, 27dB typ, 32dB max
Gain Flatness	+/-1.5dB max	+/-1.7dB max, +/-1.2dB typ
P3dB	N/A	21dBm min, 23dBm typ
OIP3	30dBm typ	35dBm typ

- 3) TYPICAL PERFORMANCE COMPARISON_a: T_{AMB}=25°C

Parameter	Freq (MHz)	Current design		New design	
		Min	Max	Min	Max
Gain (dB)	10-4200	29.71	31.91	26.49	28.96
Gain Flatness (dB)	10-4200	-----	+/-1.17	-----	+/-1.2
Input VSWR (:1)	10-4200	-----	2.19	-----	2.29
Output VSWR (:1)	10-4200	-----	2.39	-----	2.11
P1dB (dBm)	10-4200	22.56	-----	22.25	-----
P3dB (dBm)	10-4200	23.43	-----	23.26	-----
OIP3 (dBm)	10-4200	34.85	-----	32.28	-----
Noise Figure (dB)	10-4200	-----	5.32	-----	5.21
DC Voltage (V)	-----	-----	15	-----	15
Supply Current (A)	-----	-----	0.25	-----	0.27

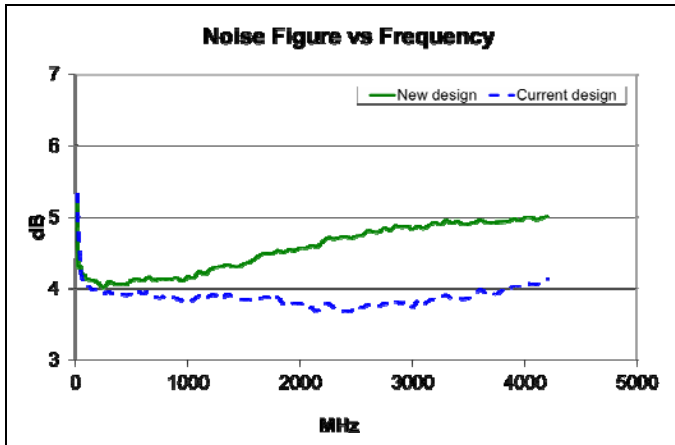
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COMPARISON PERFORMANCE CURVES^a: $T_{AMB}=25^{\circ}C$



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COMPARISON PERFORMANCE CURVES^a (Continued):



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