

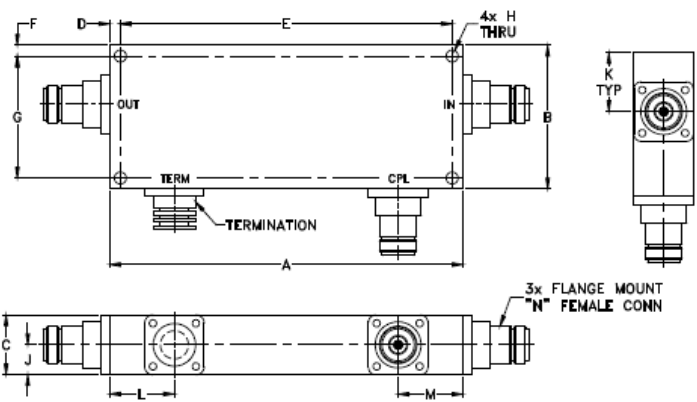
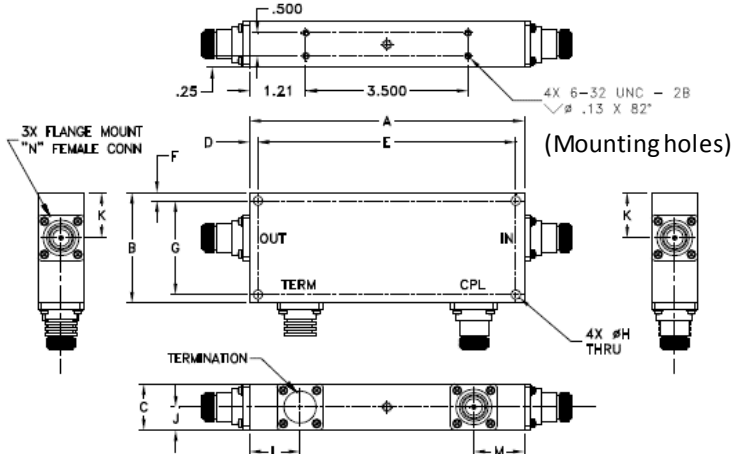
REPLACEMENT PART REFERENCE GUIDE, ZGDC10-362HP+

AN-30-011

ORIGINAL PART:	ZGDC10-362HP+	
REPLACEMENT PART:	ZGDC10-372HP+	

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

MECHANICAL DIMENSIONS

ORIGINAL PART: ZGDC10-362HP+	REPLACEMENT PART: ZGDC10-372HP+
<p>Case Style HT1398</p> 	<p>Case Style HT1398-3</p> 
<p>*Dimension sizes for both HT1398 and HT1398-3 are the same</p> <p>*Replacement part has additional mounting holes as shown</p>	

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

The Replacement part is Form, Fit compatible.

Following is a summary of changes/improvements in the Specification:

Parameter	Original Part	Replacement Part
Frequency (MHz)	380-3600	380-3700
Insertion Loss (dB) (2700-3600 MHz)	0.40 Max	0.35 Max
Weatherproof	IP67	None

For typical performance and Graphs: See paragraphs 2 and 3

2) TYPICAL PERFORMANCE COMPARISON AT ROOM TEMPERATURE:

MODEL: ZGDC10-362HP+ (RF Parameters)

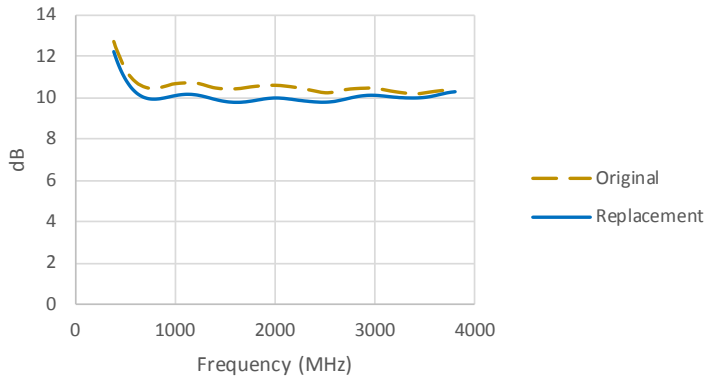
For typical performance and Graphs: See paragraphs 2 and 3

RF Parameters	Frequency (MHz)		Original Design @ 7 Units			Replacement Design @ 10 Units		
	Low	High	Min	Ave	Max	Min	Ave	Max
Coupling (dB)	380	600	10.4	11.8	12.7	9.9	11.1	12.6
	600	2700	9.8	10.2	10.8	9.6	10.1	10.6
	2700	3600	9.9	10.2	10.5	9.8	10.2	10.4
	2700	3700	-	-	-	9.8	10.2	10.5
Flatness (\pm)	380	600	0.98	0.99	1.01	0.93	1.00	1.04
	600	2700	0.23	0.27	0.30	0.15	0.21	0.27
	2700	3600	0.07	0.12	0.19	0.08	0.10	0.15
	2700	3700	-	-	-	0.08	0.13	0.22
Insertion Loss (dB)	380	600	0.03	0.05	0.08	0.03	0.04	0.05
	600	2700	0.04	0.11	0.18	0.04	0.09	0.15
	2700	3600	0.09	0.16	0.22	0.13	0.16	0.20
	2700	3700	-	-	-	0.13	0.17	0.21
Directivity (dB)	380	600	27.7	31.1	36.9	26.6	32.4	43.2
	600	2700	18.3	28.0	53.7	18.8	28.6	53.1
	2700	3600	18.0	28.4	58.2	14.4	25.0	46.5
	2700	3700	-	-	-	14.4	25.0	46.5
VSWR Input (:1)	380	600	1.03	1.04	1.07	1.00	1.02	1.07
	600	2700	1.01	1.08	1.22	1.00	1.05	1.14
	2700	3600	1.04	1.17	1.28	1.03	1.09	1.14
	2700	3700	-	-	-	1.01	1.08	1.14
VSWR Output (:1)	380	600	1.02	1.04	1.06	1.00	1.02	1.07
	600	2700	1.00	1.08	1.21	1.00	1.05	1.16
	2700	3600	1.06	1.19	1.31	1.02	1.09	1.16
	2700	3700	-	-	-	1.02	1.08	1.16
VSWR Coupling (:1)	380	600	1.02	1.05	1.07	1.01	1.04	1.09
	600	2700	1.00	1.09	1.26	1.00	1.06	1.14
	2700	3600	1.09	1.19	1.27	1.01	1.08	1.17
	2700	3700	-	-	-	1.01	1.08	1.19

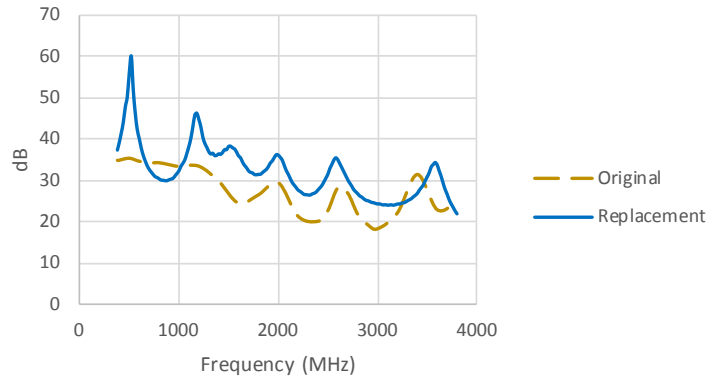
3) TYPICAL PERFORMANCE GRAPHS AT ROOM TEMPERATURE:

MODELS: ZGDC10-362HP+ (Original Part) & ZGDC10-372HP+ (Replacement Part)

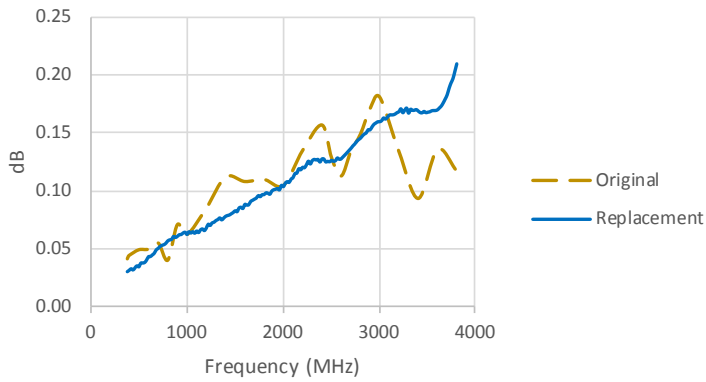
Coupling



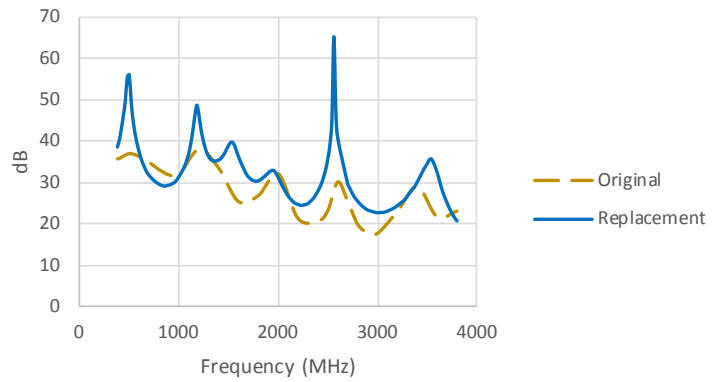
Input Return Loss



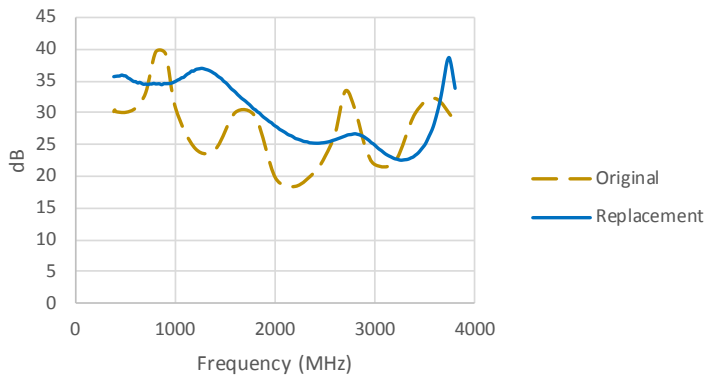
Insertion Loss



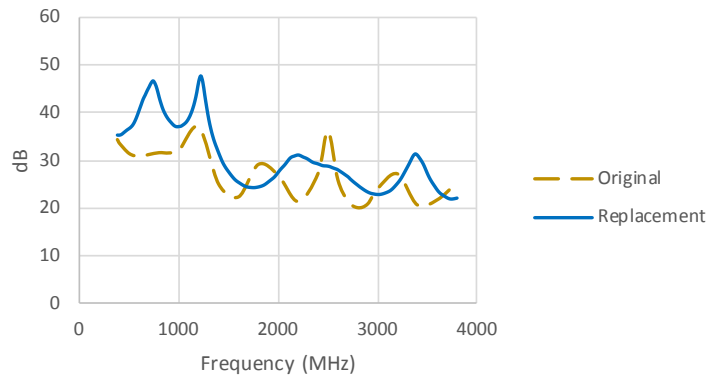
Output Return Loss



Directivity



Coupling Return Loss



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