REPLACEMENT PART REFERENCE GUIDE, ZGBDC10-362HP+ AN-30-012

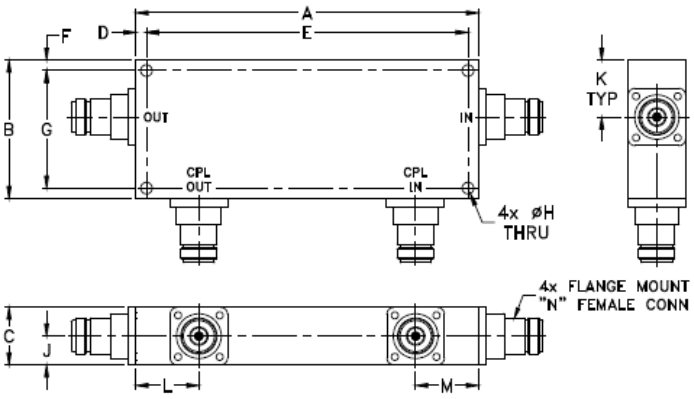
ORIGINAL PART:	ZGBDC10-362HP+	
REPLACEMENT PART:	ZGBDC10-372HP+	

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

MECHANICAL DIMENSIONS

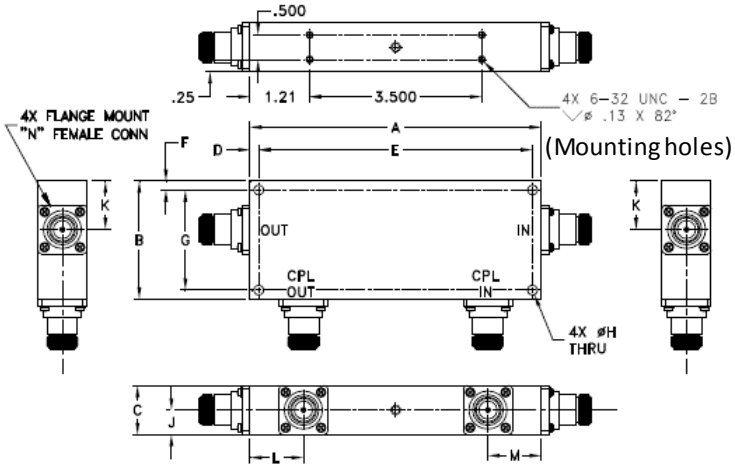
ORIGINAL PART: ZGBDC10-362HP+

Case Style HT1760



REPLACEMENT PART: ZGBDC10-372HP+

Case Style HT1760-1



*Dimension sizes for both HT1760 and HT1760-1 are the same
*Replacement part has additional mounting holes as shown

CONCLUSION:

1) **FORM-FIT-FUNCTIONAL ANALYSIS$_a$**:

The Replacement Part is Form, Fit compatible.

Parameter		Original Part	Replacement Part
Frequency (MHz)		380-3600	380-3700
Coupling Flatness (±)	(380-600 MHz)	1.75 Max	1.25 Max
	(600-2700 MHz)	1.2 Max	0.6 Max
	(2700-3600 MHz)	1.2 Max	0.5 Max
Insertion Loss (dB)	(380-600 MHz)	0.25 Max	0.20 Max
	(600-2700 MHz)	0.40 Max	0.30 Max
	(2700-3600 MHz)	0.50 Max	0.35 Max
Directivity (dB)	(600-2700 MHz)	14.0 Min	15.0 Min
	(2700-3600 MHz)	13.6 Min	14.0 Min
Weatherproof		IP67	None

Following is a summary of changes/improvements in the

Specification:

For typical performance and Graphs: See paragraphs 2 and 3

2) TYPICAL PERFORMANCE COMPARISON AT ROOM TEMPERATURE:

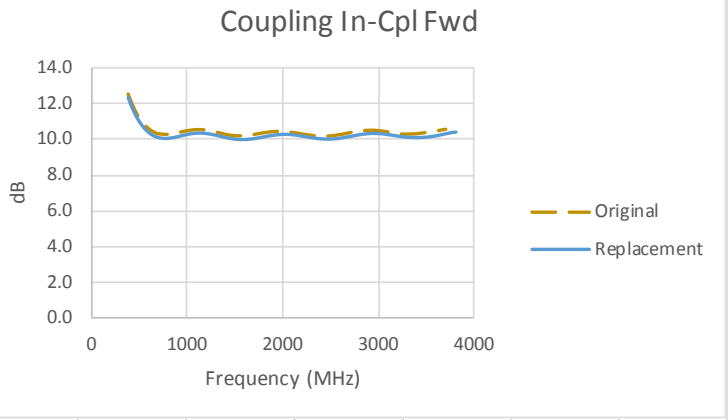
MODEL: ZGBDC10-362HP+ (RF Parameters)

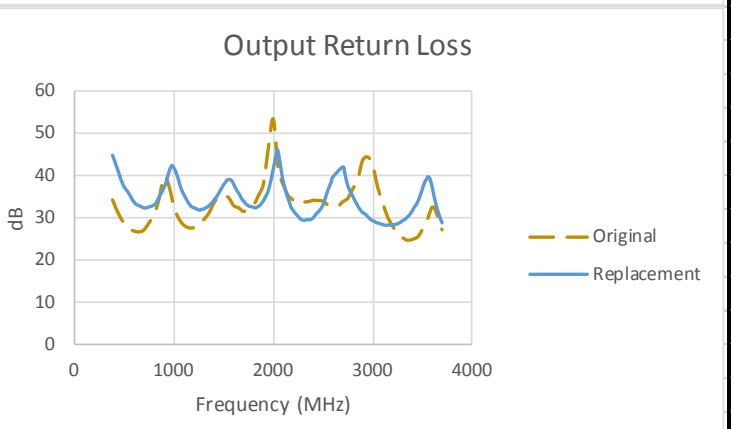
For typical performance and Graphs: See paragraphs 2 and 3

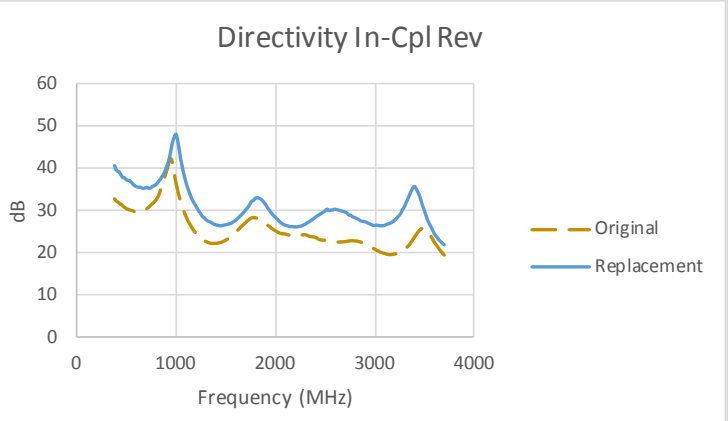
RF Parameters	Frequency (MHz)		Original Design @ 10 Units			Replacement Design @ 10 Units		
	From	To	Min	Ave	Max	Min	Ave	Max
Coupling (dB)	380	600	10.4	11.6	12.6	10.0	11.0	12.4
	600	2700	9.9	10.4	10.8	9.5	10.1	10.6
	2700	3600	10.0	10.5	10.9	9.7	10.2	10.6
	2700	3700	-	-	-	9.7	10.2	10.6
Coupling Flatness (+/-)	380	600	0.95	0.97	0.99	0.96	0.99	1.02
	600	2700	0.17	0.20	0.25	0.17	0.21	0.27
	2700	3600	0.11	0.13	0.16	0.10	0.12	0.15
	2700	3700	-	-	-	0.11	0.13	0.16
Insertion Loss (dB)	380	600	0.04	0.05	0.08	0.03	0.04	0.05
	600	2700	0.07	0.16	0.24	0.04	0.10	0.16
	2700	3600	0.23	0.28	0.33	0.15	0.18	0.22
	2700	3700	-	-	-	0.15	0.18	0.22
Directivity (dB)	380	600	28.3	32.3	39.7	29.9	37.7	49.7
	600	2700	17.7	26.0	43.4	19.8	29.0	56.2
	2700	3600	17.2	20.7	33.3	15.7	24.6	37.9
	2700	3700	-	-	-	15.6	24.1	37.9
Return Loss Input (dB)	380	600	25.3	33.0	46.4	33.4	41.8	51.5
	600	2700	23.6	33.3	54.3	24.7	34.6	60.5
	2700	3600	23.7	32.4	55.3	22.7	30.5	62.7
	2700	3700	-	-	-	22.7	30.9	63.9
Return Loss Output (dB)	380	600	25.1	32.6	43.3	33.6	41.0	57.8
	600	2700	22.0	32.4	53.2	25.8	34.1	57.5
	2700	3600	22.0	30.6	50.2	24.4	31.2	55.3
	2700	3700	-	-	-	23.1	31.3	58.5
Return Loss Couping (dB)	380	600	26.4	33.4	51.4	33.8	41.0	55.5
	600	2700	23.0	32.0	55.3	25.5	33.8	54.1
	2700	3600	22.7	30.6	52.3	22.7	30.0	49.2
	2700	3700	-	-	-	22.8	29.7	49.2

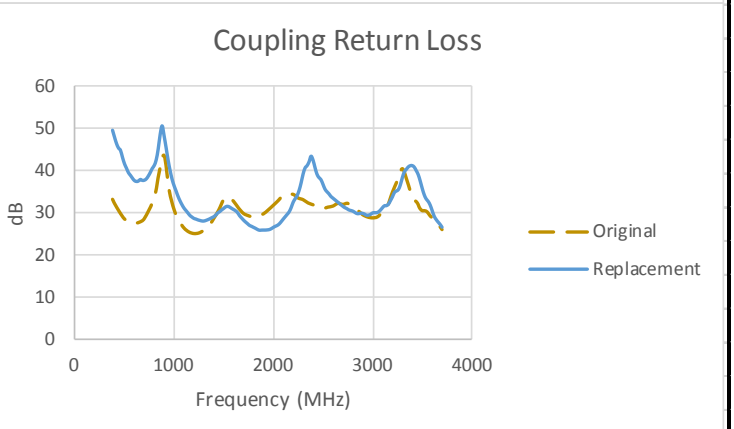
3) **TYPICAL PERFORMANCE GRAPHS AT ROOM TEMPERATURE**:

MODELS: ZGBDC10-362HP+ (Original Part) & ZGBDC10-372HP+ (Replacement Part)









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