

# 250 Watt 90° *HYBR-LINE* Coupler



400-1000 MHz

Model: HBL-400-1000-R25J



<b>Frequency:</b>	<b>400 - 1000 MHz</b>
<b>Amplitude Balance:</b>	<b>±0.60 dB Max.</b>
<b>Power:</b>	<b>250 Watts CW</b>
<b>Phase Balance:</b>	<b>± 2° Typical</b>
<b>Insertion Loss:</b>	<b>0.25 dB Max.</b>
<b>Isolation:</b>	<b>20 dB Min.</b>
<b>VSWR:</b>	<b>1.20:1 Max. All Ports</b>

**HBL Series** Drop-In Hybrid couplers provide High Power dividing or combining while exhibiting excellent phase and amplitude balance over continuous broadband operation. Solid compact designs are able to operate in a wide variety of environments, which include Medical, Industrial, Commercial wireless, Military, and Space. The **P3** library of designs allows for modifications of standard designs to be made quickly and inexpensively to meet specific requirements with short delivery times. Consult factory for special requirements or frequency ranges.

**NOTES:**

Material: Aluminum Alloy. 6061-T651  
 Finish: Chem-Film, Clear Iridite MIL-DTL-5541F  
 Operating Temperature: -55°C to +85°C

Specifications subject to change without notice

Technical drawing showing dimensions and specifications for the HBL-400-1000-R25J coupler. Dimensions include: overall width 1.350, lead length .150, lead width .050 TYP. (4 PLACES), and various port spacings. Two .100 DIA. THRU. holes are shown. The drawing also includes a side view showing eyelet projections and a phase relationship table for 90° hybrids.

INPUT	OUTPUT			
	A	B	C	D
A	---	Termination	0°	-90
B	Termination	---	-90	0°
C	0°	-90	---	Termination
D	-90	0°	Termination	---

**NOTES:**

- TOLERANCE IS ±.020, (UNLESS OTHERWISE SPECIFIED)
- LEAD WIDTH: .050" TYP.
- LEAD LENGTH: .150" TYP.
- LEAD MATERIAL: 99.99% PURE SILVER (.005" THK.)

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