

Dual Coupler/E-Bend

APPROVALS			REVISIONS			
	INITIALS	DATE	REV	DESCRIPTION	DATE	APPR
Drawn	JFG	03MAR00	1	Prototype Release	03MAR00	JFG
Engineering						
Manufacturing						
Marketing						

1.0 General Description

This document describes a custom waveguide coupler that incorporates two directional coupler probes and an e-plane bend in a single waveguide component. The probe design is the same as those used in GAE's WaveProbe™ family of waveguide couplers that offer high performance microwave power monitoring in a small package.

The input waveguide flange is a variation of the WR284 Q-D (quick-disconnect) round flange that uses a single screw clamp for waveguide connections. In this configuration the flange bolt holes have been eliminated so as to encourage the use of the single screw clamp and quick-disconnect feature.

2.0 Specifications**2.1 Electrical**

Frequency	2450 MHz +/- 50 MHz
Power (continuous)	6 kW
Coupling Factor	60 dB nominal; measured and indicated to within +/- 0.2 dB (both probes)
Directivity	23 dB minimum

2.2 Mechanical

Waveguide	WR284
Waveguide Flange	Input: Q-D Round (UG584/U) Output: CPR (UG1725/U)
Coupler Output Connector	Type N female
Construction	Aluminum waveguide and flanges
Finish	Clear chemical film (Alodine); Black paint

3.0 Ordering Information

Part Number	910303
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4.0 Outline Drawing

