50Ω 90 Degree 3 dB Hybrid Coupler 800M to 1 GHz

Case PN: 6UFH2W6H41SMAP4

Features:

* Frequency Range: 800 MHz to 1000 MHz

* Low Insertion Loss 0.2 dB

* Tight Amplitude Balance: ± 0.3 dB

* High Isolation: 23 dB Min

* Maximum Input Power: 25 W (Avg. CW)

* Stainless Steel SMA Female Connector

* Operation Temperature: -40 to +85°C

* ROHS Compliance

* High Quality Rogers RO4350 RF PCB (very low loss and high thermal performance)

Applications:

- * Wireless Communication
- * Test Instrumentation
- * Mobile Infrastructure
- * Power Detection
- * General Purpose Wireless
- * SDR & Ham Radio
- * Test Instrumentation

General Description:

HCUP800M1G25W is a high performance 3dB Hybrid Coupler in an easy to use, 4 port SMA rugged Enclosure.

The Hybrid Coupler is designed for broadband transmit and receiver systems with low insertion loss and high isolation. It can handle maximum input CW power 25 Watts.

There are standard four ports for the Hybrid Coupler: Input, Isolation, Output (3dB 0 degree) and Output (3dB 90 degree).

This hybrid Coupler can be used as either Splitter or Combiner mode. The Laser Marked configuration is for Splitter Mode. Please refer to Configuration Table for Combiner usage.



Port Configuration:

The Hybrid Coupler has permanent laser making to denote 4 ports: "IN", "OUT", "ISO" and "OUT 90". This is for Splitter Configuration. The following table shows Port Configuration for Combiner Configuration:

Configuration	Port: IN	Port: ISO	Port: OUT 90	Port: OUT
Splitter	Input	Isolated	-3dB 90 deg	-3dB 0 deg
*Combiner	A 90 deg	A 0 deg	Isolated	Output

*Notes: "A" is the amplitude of the applied signals. When two quadrature signals with equal amplitudes are applied to the coupler as described in the table, they will combine at the output port.



Outline Drawing (inch)

