Preliminary Specifications

## High Power, 2 Channel Transmit Combiner for AMPS/GSM/IS-95 800-960 MHz PD60-0001-02S

## Features

- Low Loss
- High Power Handling
- Integral Heat Sink
- High Isolation
- Low VSWR
- Low Cost


## Description

M/A-COM's PD60-0001-02S is designed to provide a low loss method of combining signals from two amplifiers or transmitters in a number of cellular bands. The combiner incorporates high power internal components and an integral heat sink to enable the device to combine noncoherant 50 Watt signals. The housing and heat sink are fabricated as one piece for optimum heat transfer and low cost. The insertion loss, when combining non-coherant signals, is a low -3.11 dB nominal, only 0.10 dB above the theoretical combining loss for a 2 -way device. Microstrip construction offers a design that is cost effective and highly repeatable.

Performance Specifications: 800-960 MHz

| Parameter | Limit | Typical |
| :--- | :---: | :---: |
| Impedance | 50 Ohms Nom | - |
| VSWR | $1.20: 1 \mathrm{Max}$ | $1.10: 1$ |
| Insertion Loss* | 0.2 dB Max | 0.10 dB |
| Amplitude Balance | 0.20 dB Max | 0.05 dB |
| Isolation | 20 dB Min | 26 dB |
| Max Input Power | $50 \mathrm{Watts} /$ Input | - |
| Operating Temp | -40 to $+60^{\circ} \mathrm{C}$ | - |

*Above 3dB Theoretical Combining Loss


The required method of cooling is forced air at 30 CFM at $+60^{\circ} \mathrm{C}$ Max ambient for two 50 Watt simultaneous inputs. If the input power level or ambient temperature is lowered, the forced air requirement can be reduced.

This device can be provided with type N connectors or different power handling capability. M/A-COM also offers a wide selection of cost effective devices for combining and dividing any number of channels in popular cellular transmit and receive bands. Please consult our factory.

