



Low Cost Six-Way Power Splitter/Combiner 1700 - 2000 MHz



Features

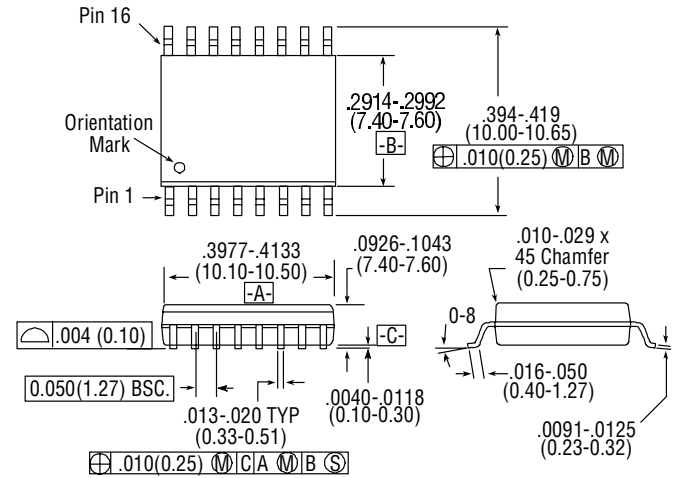
- Small Size, Low Profile
- Industry Standard SOW-16 SMT Plastic Package
- Superior Repeatability
- Insertion Loss: 1.1 dB Typical
- Isolation: 22 dB Typical
- Low Cost

Description

M/A-COM's DS56-0002 is an IC-based monolithic power divider in a low cost SOW-16 -lead plastic package. This 6-way power divider is ideally suited for applications where small size, low profile and low cost, without sacrificing performance, are required. Typical applications include base stations, portables and PCMCIA cards for wireless standards such as DCS-1800, PCN, PCS, DECT and PHS. Available in tape and reel.

The DS56-0002 is fabricated using a passive-integrated circuit process. The process features full-chip passivation for increased performance and reliability.

SOW-16



16-Lead SOP outline dimensions

Wide body (.300)

(All dimensions per JEDEC No. MS-013-AA, Issue C)

Dimensions in () are in mm.

Unless Otherwise Noted: .xxx = 0.010 (.xx = 0.25)
.xx = 0.02 (.x = 0.5)

Ordering Information

| Part Number | Package |
|---------------|------------------------------------|
| DS56-0002 | SOW 16-Lead Plastic Package |
| DS56-0002-TR | Forward Tape and Reel ¹ |
| DS56-0002-RTR | Reverse Tape and Reel ¹ |

1. If specific reel size is required, consult factory for part number assignment.

Typical Electrical Specifications¹, T_A = +25°C

| Parameters | Units | Min. | Typ. | Max. |
|-------------------|-------|------|-------|-------|
| Insertion Loss | dB | — | 1.2 | 1.5 |
| Isolation | dB | 18 | 22 | — |
| VSWR | — | — | 1.4:1 | 1.8:1 |
| Amplitude Balance | dB | — | 0.5 | 1.0 |
| Phase Balance | ° | — | 8° | 15° |

1. All specifications apply with a 50-ohm source and load impedance.



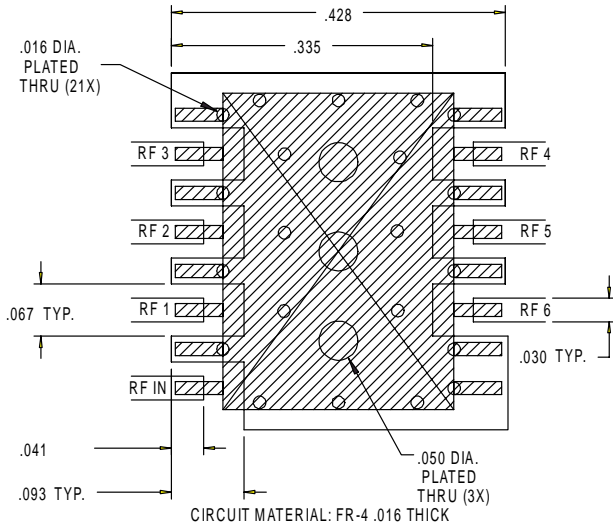
Absolute Maximum Ratings¹

| Parameter | Absolute Maximum |
|--------------------------|------------------|
| Input Power ² | 1W CW |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -65°C to 150°C |

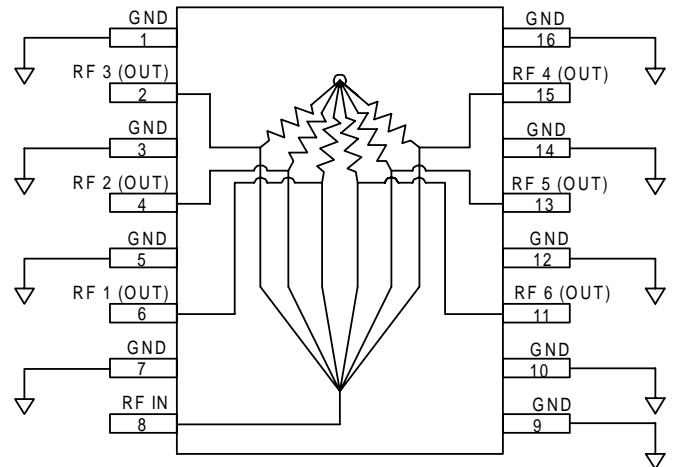
1. Exceeding these limits may cause permanent damage.
2. With internal load dissipation of 0.125 W maximum.

Recommended PCB Configuration

(Dimensions in Inches)
mm



Functional Diagram³



3. Pins 1, 3, 5, 7, 9, 10, 12, 14 and 16 must be DC and RF grounded.

Typical Performance @ +25°C

