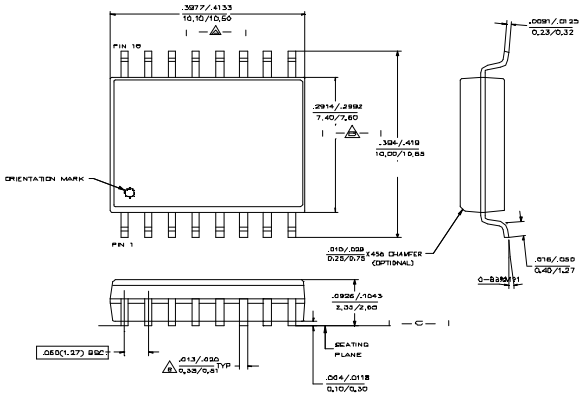
DS54-0002

Low Cost Four-Way SMT Power Splitter/Combiner 1700-2000 MHz

Features

- Small Size and Low Profile
- Industry Standard SOW-16 SMT Plastic Package
- Excellent Repeatability (Lot-to-Lot Variation)
- Typical Isolation: 17 dB
- Typical Amplitude Balance: 0.7dB
- Low Cost
- Typical Insertion Loss: 1.5dB

SOW16



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)

Description

M/A-COM's DS54-0002 is an IC-based monolithic power splitter/ combiner in a low cost SOW-16 plastic package. This device is ideally suited for applications where PCB real estate is at a premium and standard packaging for automated assembly and low cost are critical. Typical applications include infrastructure, portables and peripheral devices (PCMCIA cards) for wireless standards such as GSM, AMPS, CDPD, RAM and ARDIS. Available in tape and reel.

The DS54-0002 is fabricated using a passive-integrated circuit process. The process features full-chip passivation for increased performance and reliability.

Ordering Information

Part Number	Package
DS54-0002	SOW-16 Lead Plastic Package
DS54-0002-TR	Forward Tape and Reel[1]
DS54-0002-RTR	Reverse Tape and Reel[1]

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

Typical Electrical Specifications[1], T_A = +25°C

Parameter	Units	Typ	Min	Max
Insertion Loss Above 6.0dB	dB	1.2	—	1.5
Isolation 1700-1800MHz	dB	—	18	—
1801-2000MHz	dB	—	17	—
VSWR Input	—	—	—	1.7:1
VSWR Output 1700-2000MHz	—	—	—	1.5:1
Amplitude Balance	dB	—	—	0.7
Phase Balance	°	—	—	7

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

M/A-COM ■ North America: Tel. (800) 366-2266, Fax (800) 618-8883 ■ Asia/Pacific: Tel.+85 2 2111 8088, Fax +85 2 2111 8087 ■ Europe: Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020

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Specifications subject to change without notice.

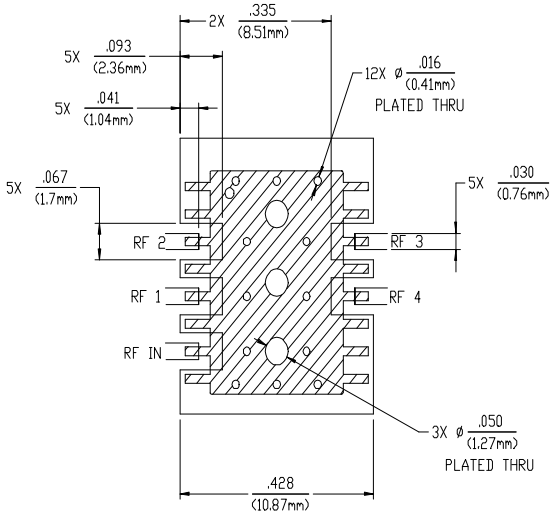
Absolute Maximum Ratings[1]

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

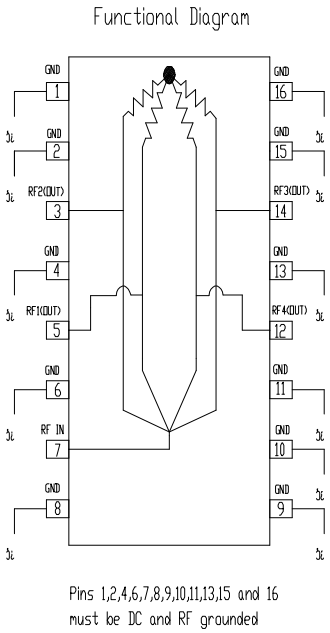
1. Exceeding these limits may cause permanent damage.
2. With Internal load dissipation of 0.125 W maximum.

Recommended PCB Configuration

(Dimensions in Inches)



Functional Diagram [3]



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