

Low Cost Two-Way SMT Power Splitter/Combiner 2200 - 2500 MHz DS52-0003

Features

- Small Size, Low Profile and Low Cost
- Industry Standard SOIC-8 SMT Plastic Package
- Superior Repeatability
- Excellent Amplitude Balance: 0.05 dB Typical
- Excellent Insertion Loss: 0.3 dB Typical
- Low Cost
- Wireless Data Frequency Coverage

Description

M/A-COM's DS52-0003 is an IC based monolithic power splitter in a low cost SOIC-8 plastic package. This 2-way device is ideally suited for applications where small size, low profile and low cost, without sacrificing performance, are required. Typical applications include base station, portables and PCMCIA cards for wireless data and spread spectrum applications. Available in tape and reel.

The DS52-0003 is fabricated using a passive-integrated circuit process. The process features full chip passivation for increased performance and reliability.

SO-8



Ordering Information

Part Number	Part Number Package	
DS52-0003	SOIC 8-Lead Plastic Package	
DS52-0003-TR	Forward Tape and Reel*	
DS52-0003-RTR	Reverse Tape and Reel*	

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

Typical Electrical Specifications¹, T_A = +25°C

Parameter	Units	Min.	Тур.	Max.
Insertion Loss Above 3.0 dB	dB		0.3	0.5
Isolation	dB	15	20	
VSWR			1.3:1	1.5:1
Amplitude Balance	dB		0.05	0.1
Phase Balance	0		3	5

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

Specifications Subject to Change Without Notice.

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V4.00

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V4.00

Absolute Maximum Ratings¹

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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)



Typical Performance @ +25°C



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Functional Diagram³



3. Pins 1, 3, 4, 6, and 7 must be RF and DC grounded.



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