



M/A-COM

DS52-0009

Low Cost Two-Way GMIC SMT Power Divider 1510 - 1660 MHz



Features

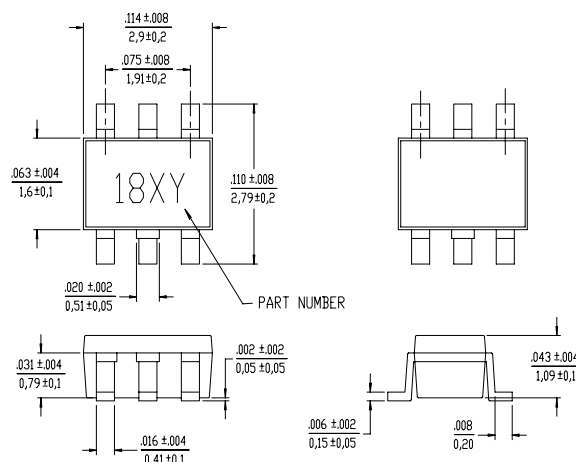
- Small Size and Low Profile
- Industry Standard SOT-26 SMT Plastic Package
- Typical Insertion Loss 0.6dB
- Typical Amplitude Balance 0.05dB
- 1 Watt Power Handling

Description

M/A-COM's DS52-0009 is an IC-based monolithic power divider using M/A-COM's GMIC technology in a low cost SOT-26 plastic package. This 2-way power divider is ideally suited for applications where small size, low insertion loss, superior phase/amplitude tracking and low cost are required. Typical applications include handsets, base station switching networks and other communication applications where size and PCB real estate are at a premium. Available in Tape and Reel.

The DS52-0009 is fabricated using a passive-integrated circuit process. The process features full-chip passivation for increased performance and reliability.

SOT-26



Ordering Information

Part Number	Package
DS52-0009	SOT-26 Lead Plastic Package
DS52-0009-TR	Forward Tape and Reel ¹
DS52-0009-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

Parameter	Units	Min	Typ	Max
Insertion Loss above 3.0dB	dB	—	0.6	0.75
Isolation	dB	18	20	—
VSWR RF Input	—	—	1.4 : 1	1.6 : 1
RF1, RF2 Outputs	—	—	1.1 : 1	1.3 : 1
Amplitude Balance	dB	—	0.05	0.2
Phase Balance	°	—	3.0	5.0

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

V2.00

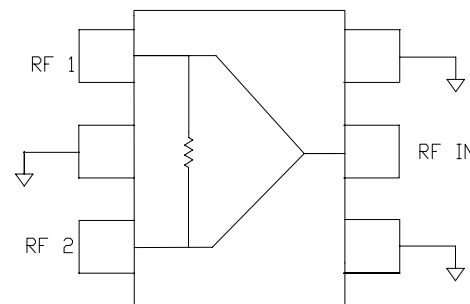
Absolute Maximum Ratings¹

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

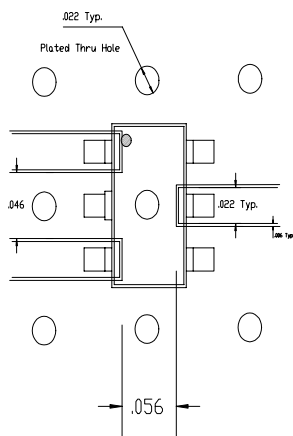
1. Exceeding these limits may cause permanent damage.

2. With internal load dissipation of 0.125 W Maximum.

Functional Diagram

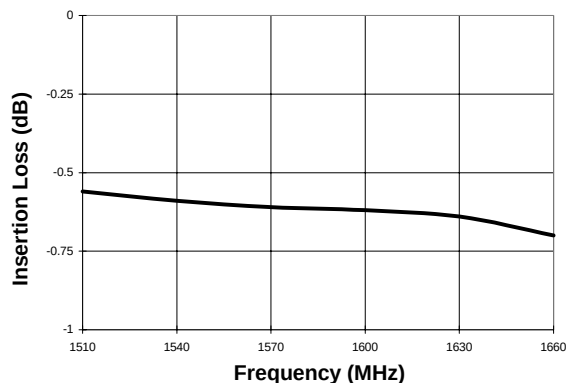


Recommended PCB Configuration

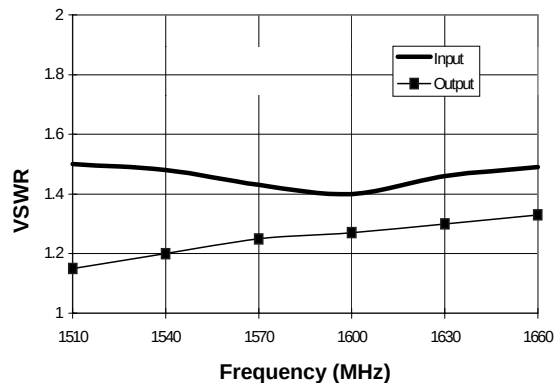


Typical Performance @ +25°C

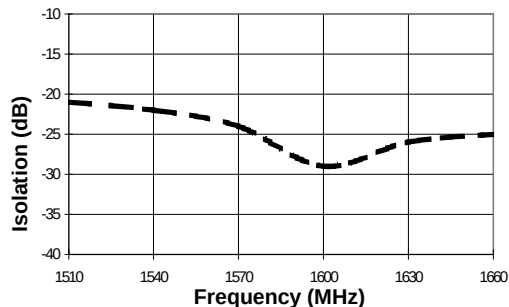
Insertion Loss vs Frequency



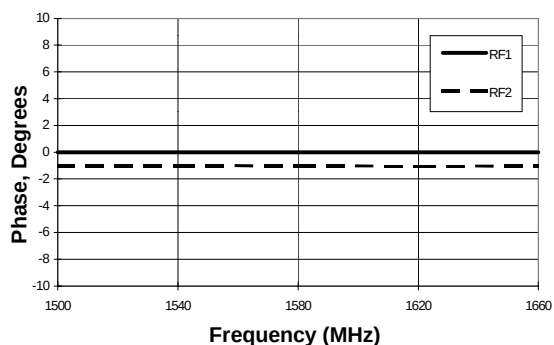
VSWR vs Frequency



Isolation vs Frequency



Phase Balance vs Frequency Relative to RF1



V2.00