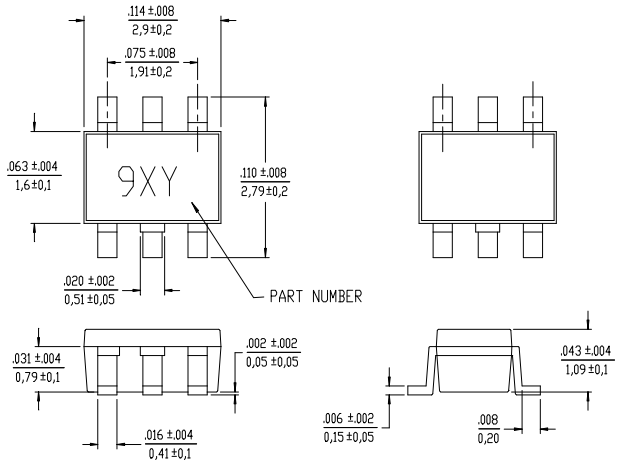
Low Cost Two-Way GMIC SMT Power Divider 824 - 960 MHz

Features

- Small Size and Low Profile
- Industry Standard SOT-26 SMT Plastic Package
- Typical Isertion Loss: 0.6dB
- Typical Isolation: 15dB
- 1 Watt Power Handling

SOT-26



Description

M/A-COM's DS52-0008 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 personal communications systems and other communication applications where size and PCB real estate are at a premium. Available in Tape and Reel.

The DS52-0008 is fabricated using a passive-integrated circuit process. The process features full-chip passivation for increased performance and reliability.

Ordering Information

Part Number	Package
DS52-0008	SOT-26 Lead Plastic Package
DS52-0008-TR	Forward Tape and Reel[1]
DS52-0008-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	Min	Typ	Max
Insertion Loss above 3.0dB	dB	—	0.6	0.8
Isolation	dB	13	15	—
VSWR RF Input	—	—	1.3 : 1	1.4 : 1
Amplitude Balance	dB	—	0.1	0.25
Phase Balance	Degrees	—	3.0	5.0

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

V1.01

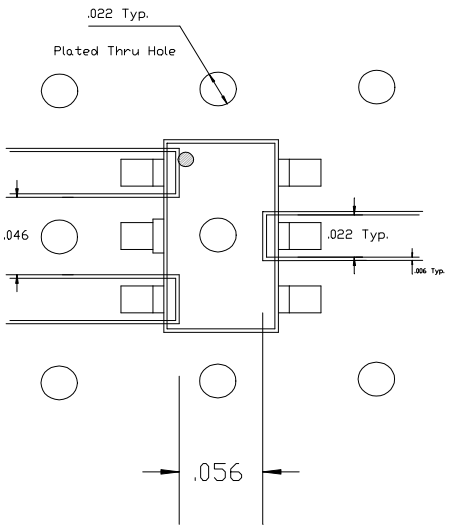
Specifications subject to change without notice.

Absolute Maximum Ratings[1]

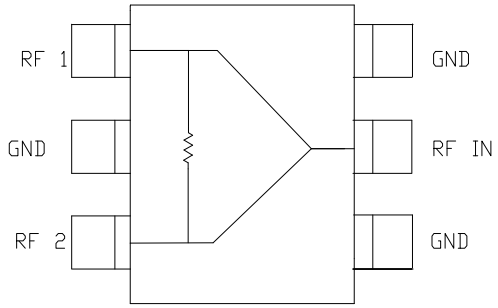
Parameter	Absolute Maximum
Input Power[2]	1 W CW
Operating Temperature	-40°C to +85°C
Storage Temperature	-65°C to +150°C

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

Recommended PCB Configuration

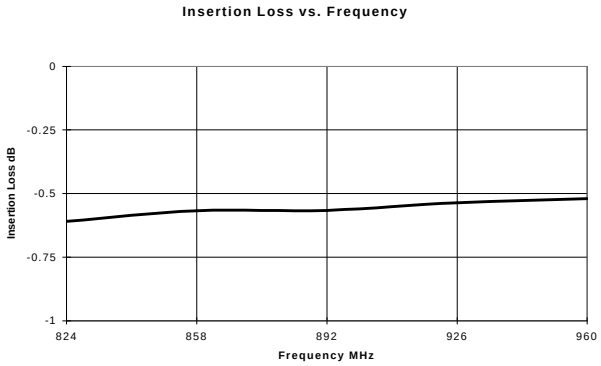


Functional Diagram

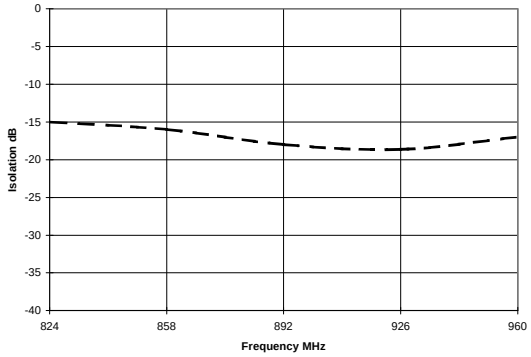


Typical Performance @ +25°C

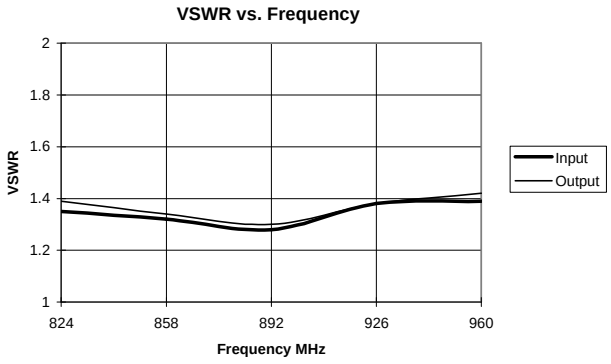
Insertion Loss



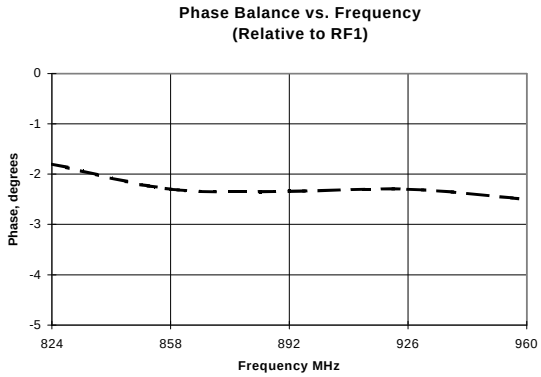
Isolation



VSWR



Phase Balance



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