

Low Cost Two-Way GMIC SMT Power Divider 2200 - 2500 MHz

DS52-0007

V1.00

Features

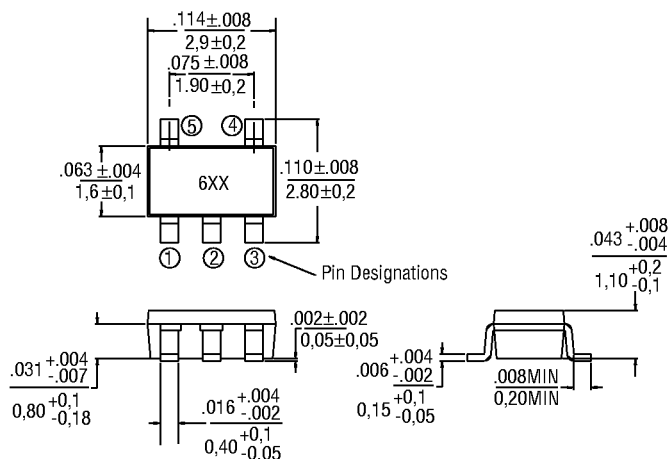
- Small Size and Low Profile
- Industry Standard SOT-25 SMT Plastic Package
- Typical Insertion Loss 0.6 dB
- Typical Amplitude Balance 0.1 dB
- 1 Watt Power Handling

Description

M/A-COM's DS52-0007 is an IC based monolithic power divider using M/A-COM's GMIC technology in a low cost SOT-25 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 DS52-0007 is fabricated using a passive-integrated circuit process. The process features full chip passivation for increased performance and reliability.

SOT-25



All lower dimensions are in millimeters

Ordering Information

Part Number	Package
DS52-0007	SOT-25 Lead Plastic Package
DS52-0007-TR	Forward Tape and Reel*
DS52-0007-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.	Typ.	Max.
Insertion Loss above 3.0 dB	dB		0.6	0.8
Isolation	dB	15	22	
VSWR RF Input			1.3:1	1.5:1
VSWR RF1, RF2 Outputs			1.2:1	1.5:1
Amplitude Balance	dB		0.1	0.25
Phase Balance	°		2.0	4.0

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

The Preliminary Specifications Data Sheet Contains Typical Electrical Specifications Which May Change Prior to Final Introduction.

M/A-COM, Inc.

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Absolute Maximum Ratings¹

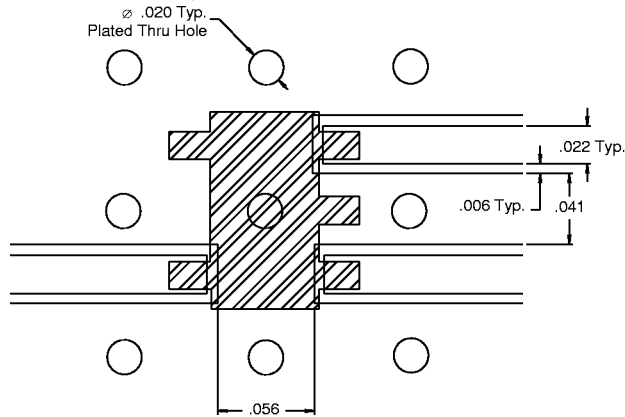
Parameter	Absolute Maximum
Input Power ²	1 W CW
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C

1. Exceeding these limits may cause permanent damage.

2. With internal load dissipation of 0.125 W maximum

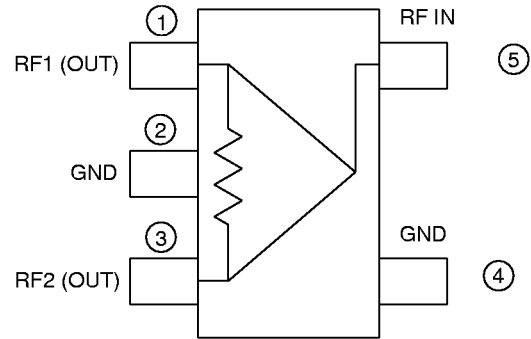
Recommended PC Board Mounting Configuration

(Dimensions in Inches)

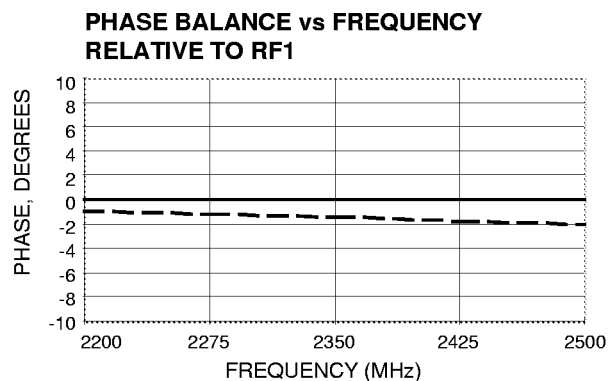
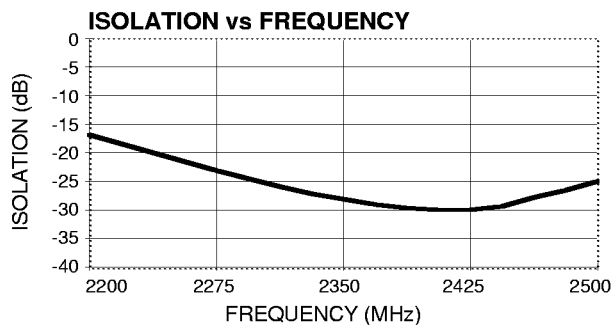
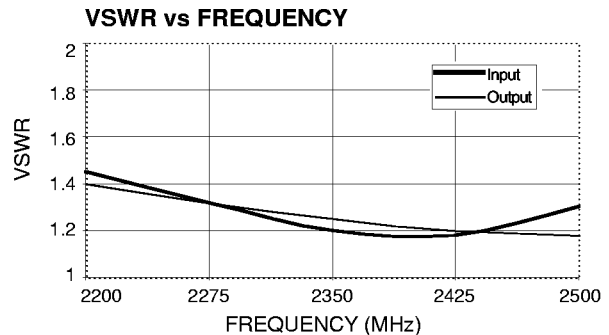
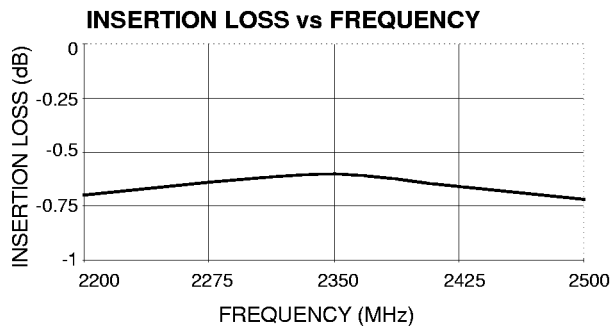


CIRCUIT MATERIAL: FR-4, .016 THICK

Functional Diagram



Typical Performance @ +25 °C



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