



M/A-COM

Low Cost Three Way Power Splitter/Combiner 824 - 960 MHz



Features

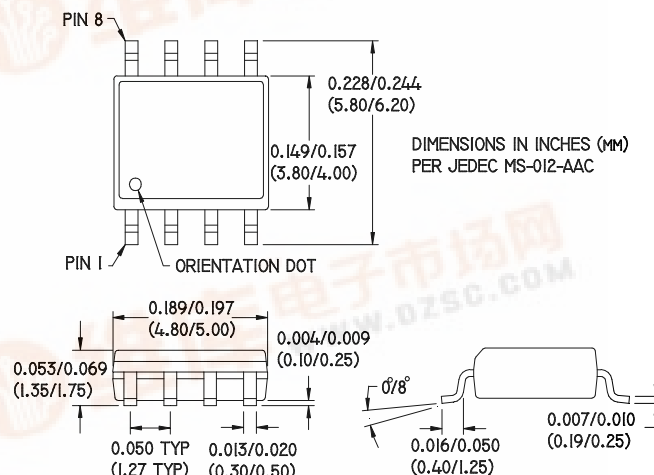
- Small Size and Low Profile
- Industry Standard SOIC8 SMT Plastic Package
- Excellent Insertion Loss 0.6 dB Typical
- Superior Repeatability
- Low Cost
- CSM, AMPS, CDPD, ARDIS, RAM Frequency Coverage

Description

M/A-COM's DS53-0001 is an IC-based monolithic power divider in a low cost SOIC-8 plastic package. This 3-way power divider is ideally suited for applications where small size, low profile and low cost without sacrificing Performance, are required. Typical applications include Base stations, portables and PCMCIA cards for cellular Applications. Available in Tape and Reel.

The DS53-0001 is fabricated using a passive-integrated circuit process. The process features full-chip passivation for increased performance and reliability.

SOIC8



Unless otherwise noted : .xxx = ± 0.010 (.xx = ± 0.25)
 .xx = ± 0.02 (.x = ± 0.5)

Ordering Information

Part Number	Package
DS53-0001	SOIC8 Lead Plastic Package
DS53-0001-TR	Forward Tape and Reel*
DS53-0001- 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 4.78 dB	dB	—	0.6	0.7
Isolation	dB	15	18	—
VSWR	—	—	1.4:1	1.6:1
Amplitude Balance	dB	—	0.6	0.8
Phase Balance	Degrees	—	2	4

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

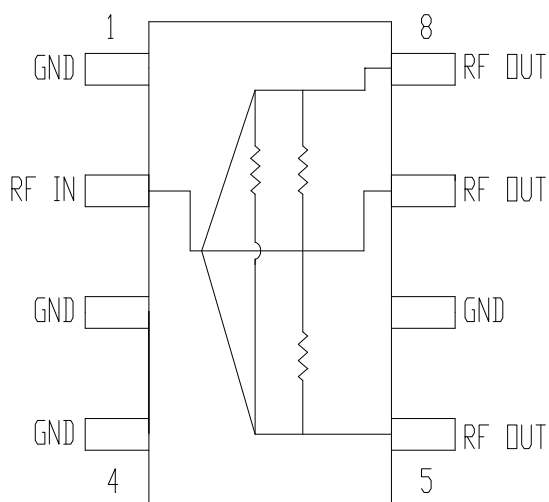
Absolute Maximum Ratings¹

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

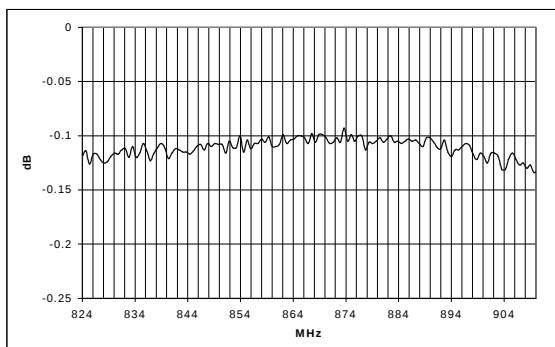
1. Exceeding these limits may cause permanent damage.

2. With internal load dissipation of 0.125 W Maximum.

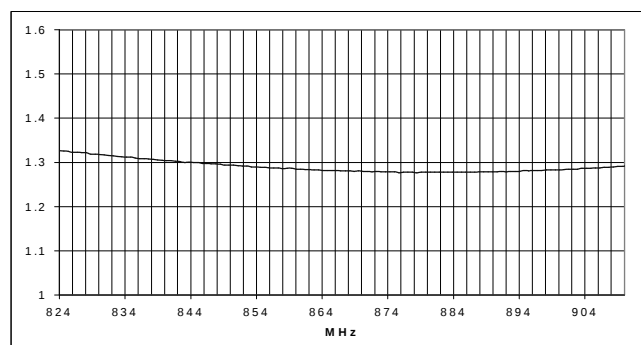
Functional Diagram



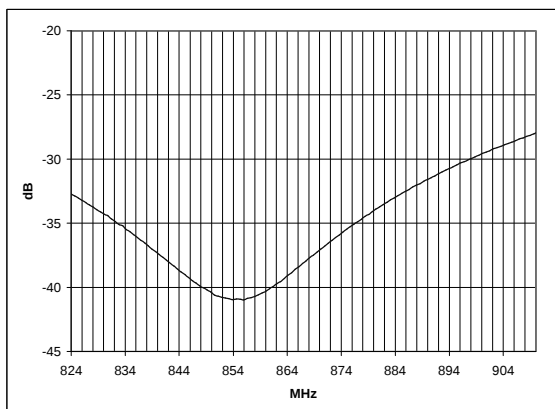
Insertion Loss



VSWR Input



Isolation



VSWR Output

