

M/A-COM

Low Cost Five-Way GMIC SMT Power Divider 1850 - 1990 MHz



Features

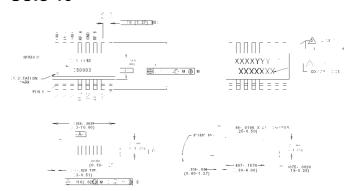
- Small Size, Low Profile
- Superior Repeatability (Lot-to-Lot Variation)
- Industry Standard SOIC-16 SMT Plastic Package
- Typical Isolation: 28 dB
- Typical Insertion Loss: 0.7 dB
- Low Cost
- 1 Watt Power Handling

Description

M/A-COM's DS55-0003 is an IC-based monolithic power divider using M/A-COM's GMIC technology in low cost SOIC-16 Plastic Packages. This 5-way power divider is ideally suited for applications where PCB real estate is at a premium and part count reduction and cost are critical. Typical applications include base station switching networks and other cellular equipment, including subscriber units. Available in tape and reel.

The DS55-0003 is fabricated using a passive-integrated circuit process. The process features full-chip passivation for increased performance and reliability.

SOIC-16



Ordering Information

Part Number	Package
DS55-0003	SOIC-16 Lead Plastic Package
DS55-0003-TR	Forward Tape and Reel ¹
DS55-0003-RTR	Reverse Tape and Reel ¹

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

Typical Electrical Specifications¹, T_A= +25°C

Parameters	Units	Min.	Тур.	Max.
Insertion Loss Above 7.0 dB	dB	_	0.7	1.2
Isolation	dB	20	28	_
VSWR Input	_	_	1.5:1	1.6:1
Output	-	_	1.2:1	1.5:1
Amplitude Balance	dB	_	0.2	0.5
Phase Balance	0	_	6	12

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

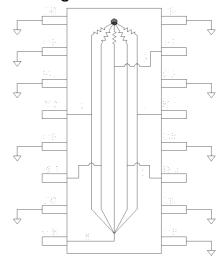
Connecting
AMP

Absolute Maximum Ratings¹

Parameter	Absolute Maximum	
Input Power ²	1W 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.

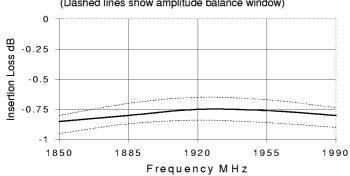
Functional Diagram

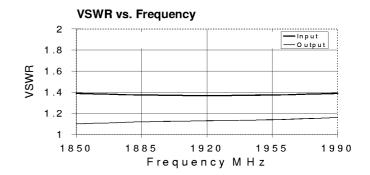


Pins labeled as ground should be DC and RF grounded.

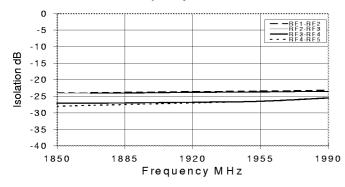
Typical Performance @ +25 $^{\circ}$ C

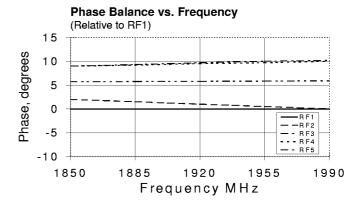






Isolation vs. Frequency





Connecting at a HIGHER level."