

Low Cost Five-Way GMIC SMT Power Divider

824 - 960 MHz

DS55

DS55-0002

V1.A

Features

- Small Size, Low Profile
- Superior Repeatability (Lot-to-Lot Variation)
- Industry Standard QSOP-20 SMT Plastic Package
- Typical Isolation: 28 dB
- Typical Insertion Loss: 0.7 dB
- Low Cost
- 1 Watt Power Handling

Description

M/A-COM's DS55-0002 is an IC-based monolithic power divider using M/A-COM's GMIC technology in low cost QSOP-20 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 DS55-0002 is fabricated using a passive-integrated circuit process. The process features full chip passivation for increased performance and reliability.

Ordering Information

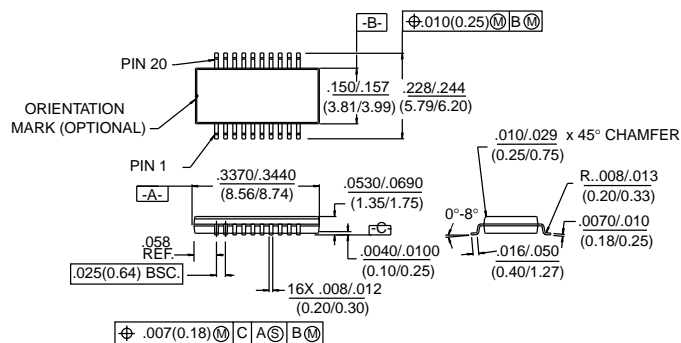
Part Number	Package
DS55-0002	QSOP 20-Lead Plastic Package
DS55-0002-TR	Forward Tape and Reel*
DS55-0002-RTR	Reverse Tape and Reel*

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

Typical Electrical Specifications¹, T_A = +25°C

Parameters	Units	Min.	Typical	Max.
Insertion Loss Above 7.0 dB	dB	—	0.7	1.2
Isolation	dB	20	28	—
VSWR Input	—	—	1.4:1	1.6:1
Output	—	—	1.3:1	1.6:1
Amplitude Balance	dB	—	0.2	0.5
Phase Balance	°	—	6	12

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

QSOP-20

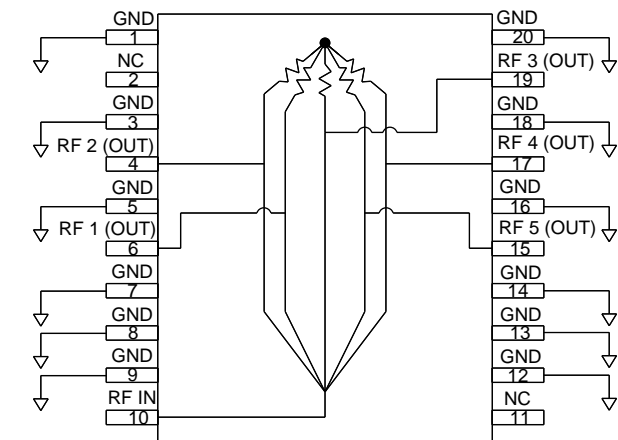
20-Lead QSOP outline dimensions
(All dimensions per JEDEC No. MS-137-AD, Issue C)
Dimensions in () are in mm.
Unless Otherwise Noted: .XXX \pm .010 (.XX \pm 0.25)
.XX=.02 (.X \pm 0.5)

Absolute Maximum Ratings¹

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

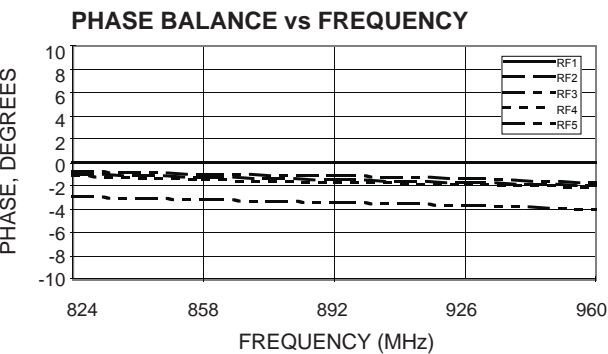
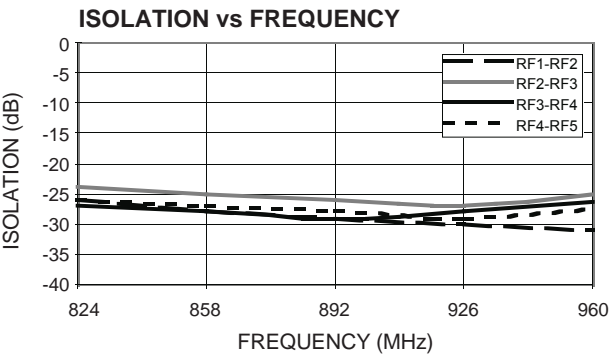
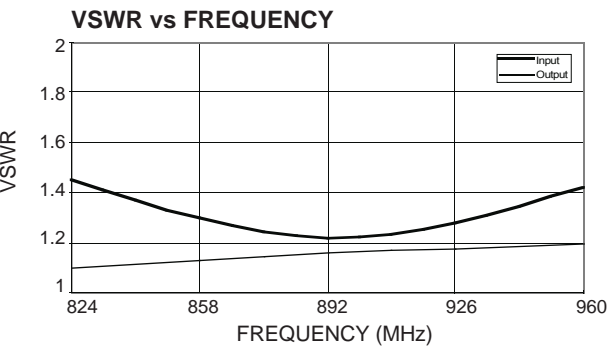
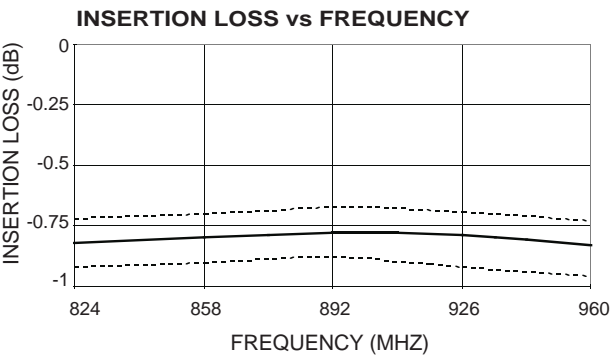
1. Exceeding these limits may cause permanent damage.
2. With internal load dissipation of 0.125 W Maximum.
Note: This part is ESD classified low level class 1.

Functional Diagram



Pins labeled as ground should be DC and RF grounded.

Typical Performance @ +25°C



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