

Low Cost Eight-Way SMT Power Divider 1700 - 2000 MHz

DS58-0002

V1.00

Features

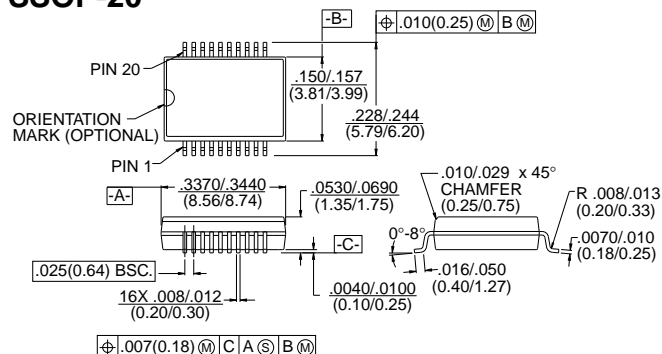
- Small Size, Low Profile
- Superior Repeatability (Lot-to-Lot Variation)
- Industry Standard SSOP-20 SMT Plastic Package
- Typical Isolation: 25 dB
- Typical Insertion Loss: 1.1 dB
- Low Cost
- 1 Watt Power Handling

Description

M/A-COM's DS58-0002 is an IC-based monolithic power divider in low cost SSOP-20 plastic packages. This 8-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 DS58-0002 is fabricated using a passive-integrated circuit process. The process features full chip passivation for increased performance and reliability.

SSOP-20



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

Ordering Information

Part Number	Package
DS58-0002	SSOP 20-Lead Plastic Package
DS58-0002-TR	Forward Tape and Reel*
DS58-0002-RTR	Reverse Tape and Reel*

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

Typical Electrical Specifications¹, T_A = +25°C

Parameter	Units	Min.	Typ.	Max.
Insertion Loss Above 9.0dB	dB		1.1	1.5
Isolation	dB	20	25	
VSWR			1.4:1	1.8:1
Amplitude Balance	dB		0.8	1.2
Phase Balance	°		8	14

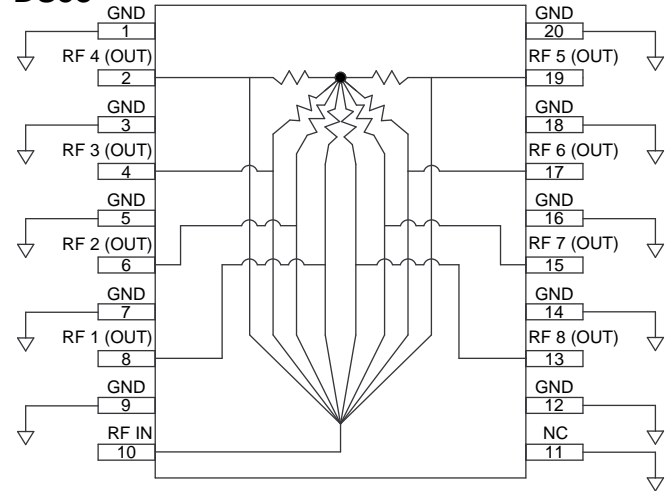
1. All specifications apply with 50-Ohm source and load impedance.

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.

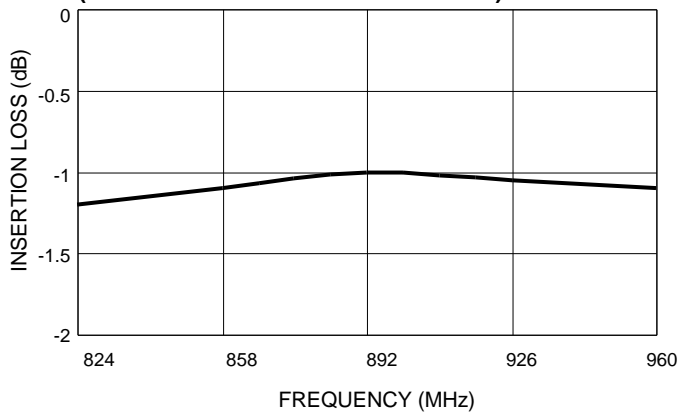
DS58



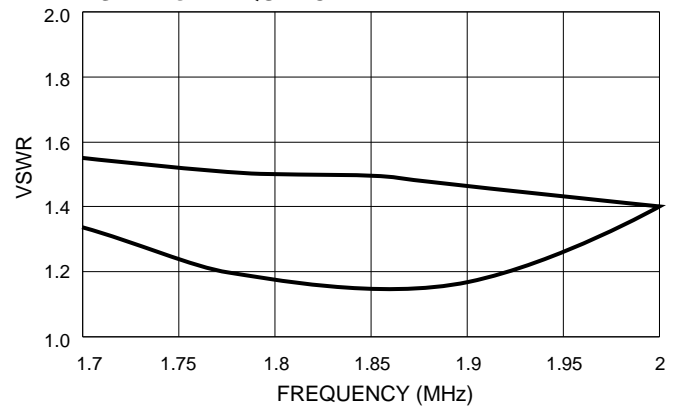
PINS 1,3,5,7,9,12,14,16,18 AND 20
SHOULD BE DC AND RF GROUNDED.

Typical Performance @ +25°C

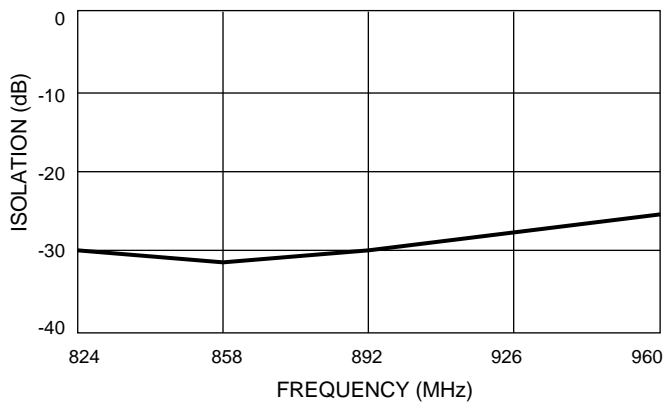
INSERTION LOSS vs FREQUENCY
(ABOVE THEORETICAL SPLIT LOSS)



VSWR vs FREQUENCY



ISOLATION vs FREQUENCY



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