

SAC3803A



GaAs MMIC 3-Way Power Divider
6~18GHz

Rev 2.0

Features

- Frequency: 6~18GHz
- Insertion Loss: $\leq 1.5\text{dB}@18\text{GHz}$
- Input/Output VSWR: 1.3:1
- Die Size: 1.82mm×1.21mm×0.1mm

Typical Applications

- Microwave radio including point to point communication
- Telecommunication
- Weather radar
- Optical communication
- Test instrumentation
- SatCom
- VSAT
- Military and Aerospace

General Description

SAC3803A is a GaAs MMIC 3-Way 0° power divider which operates between 6~18GHz with insertion loss 1.5dB and VSWR 1.3:1.

The chip offers full passivation for increased reliability and moisture protection.

Electrical Performance ($T_A=25^\circ\text{C}$, $Z_0=50\Omega$)

Parameter	Symbol	Condition's	Min.	Typ.	Max.	Units
Frequency Range	f	Zin=Zout=50Ω TA=+25°C	6	—	18	GHz
Insertion Loss	IL		—	-1	-1.5	dB
Amplitude Unbalance	IP		—	±0.2	±0.4	dB
Input VSWR	VSWR		—	1.3:1	1.6:1	:1
Output VSWR			—	1.2:1	1.5:1	:1
Isolation	ISO		-15	-25	—	dB

Absolute Maximum Ratings

Maximum Input Power	+20dBm	Operating Temperature	-55°C~+85°C
Channel temperature	150°C	Storage Temperature	-65°C~+150°C

SuperApex, LLC

1580 S. Milwaukee Ave. Suite 405, Libertyville, IL 60048, USA
Tel: 1-847-505-8319, 1-847-573-9866
E-mail: sales@superapexco.com
Website: www.superapexco.com

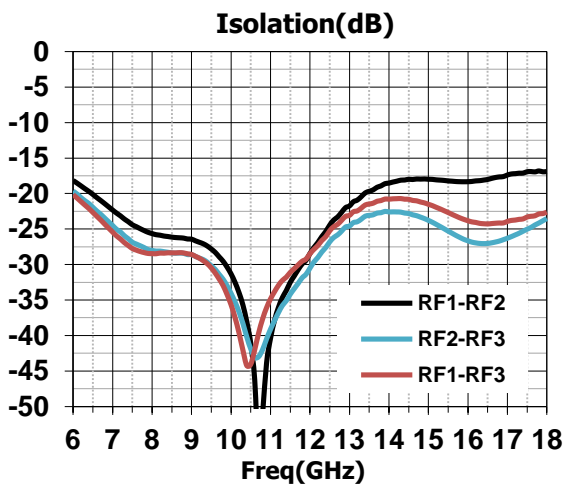
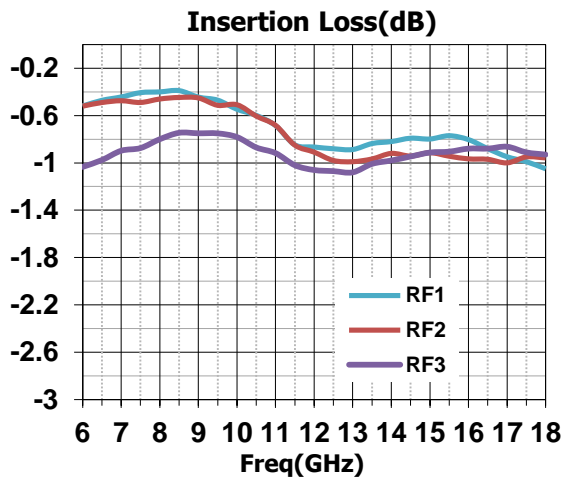
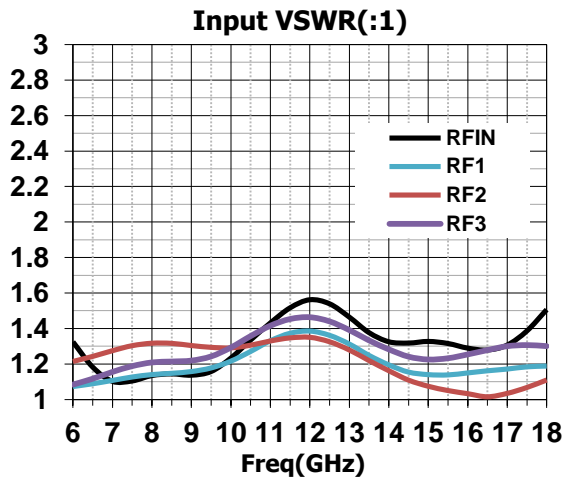
SAC3803A



GaAs MMIC 3-Way Power Divider
6~18GHz

Rev 2.0

Typical Performance Curve Fixture test



SuperApex, LLC

1580 S. Milwaukee Ave. Suite 405, Libertyville, IL 60048, USA
Tel: 1-847-505-8319, 1-847-573-9866
E-mail: sales@superapexco.com
Website: www.superapexco.com

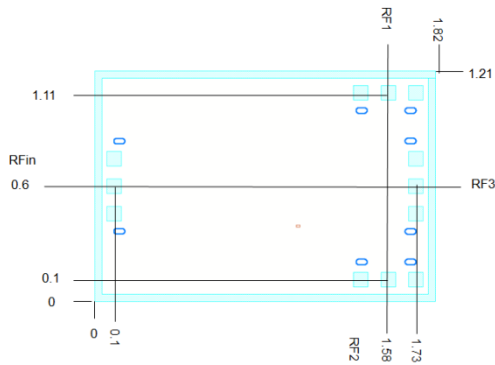
SAC3803A



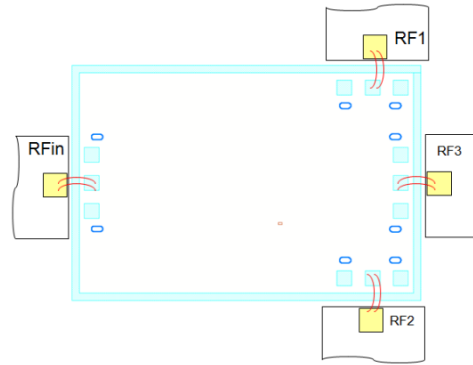
GaAs MMIC 3-Way Power Divider
6~18GHz

Rev 2.0

Die Outline
(All dimensions in mm)



Assembly Diagram



Attention:

GaAs MMIC devices are susceptible to damage from Electrostatic Discharge. Proper precautions should be observed during handling, assembly and test.