XT3803A

GaAs MMIC 3-Way Power Divider
6～18GHz

Rev 1.0

Features

- Frequency：6～18GHz
- Insertion Loss：≤1.5dB@18GHz
- 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 Aerospce

General Description

XT3803A 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℃,Z_0=50Ω)

Parameter	Symbol	Condition's	Min.	Typ.	Max.	Units
Frequency Range	f	Zin=Zout=50Ω T_A=+25℃	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℃～+85℃
Channel temperature	150℃	Storage Temperature	-65℃～+150℃

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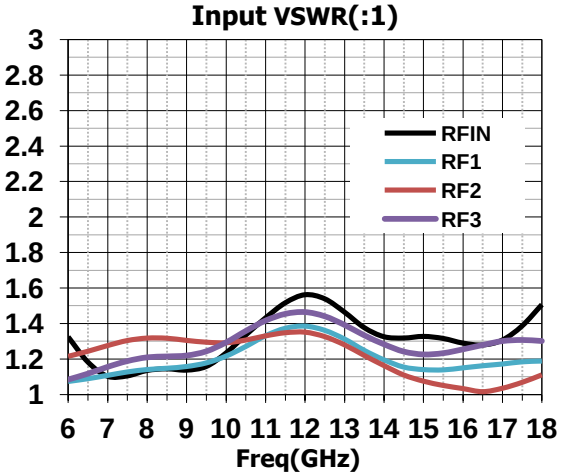
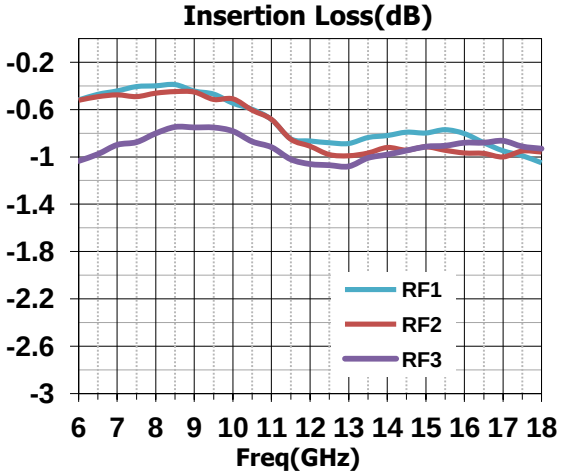
Typical Performance Curve

Fixture test

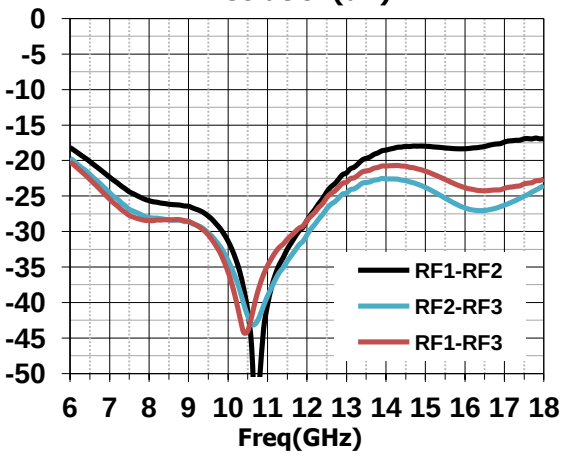
Input VSWR(:1)



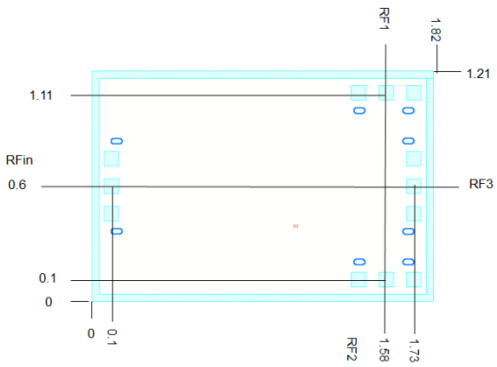
Insertion Loss(dB)



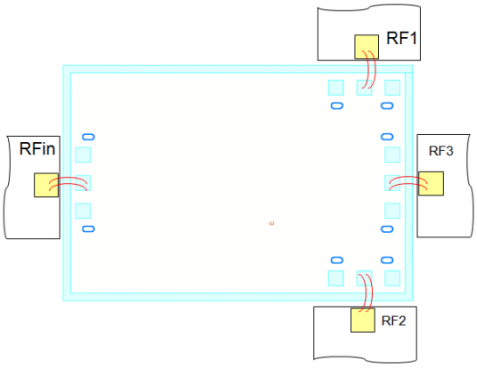
Isolation(dB)



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.