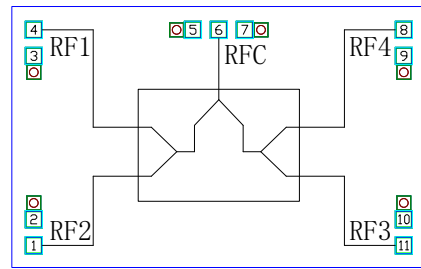


Features

- Freq: 8.0-12.0 GHz
- Insertion Loss: 0.8 dB
- Isolation: 26 dB
- Input Return Loss: -20 dB
- Output return loss: -18 dB
- 50Ω Input/ Output
- Die Size: 2.4×1.5×0.1mm³

Functional Diagram

General Description

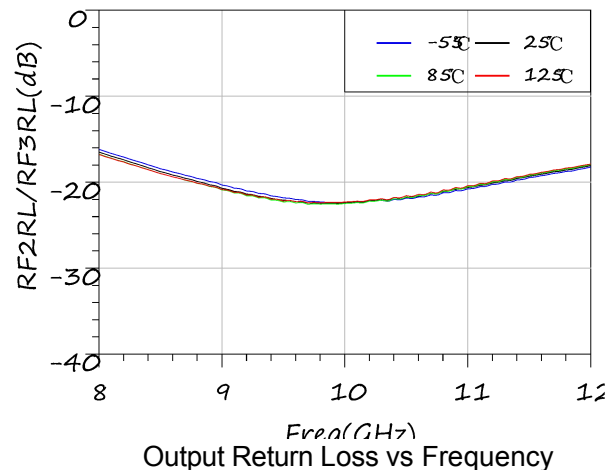
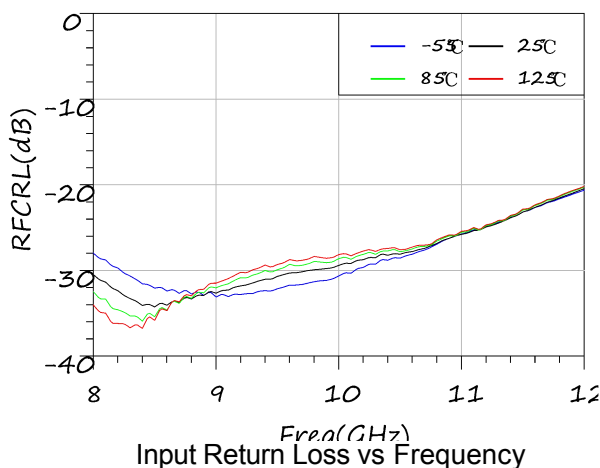
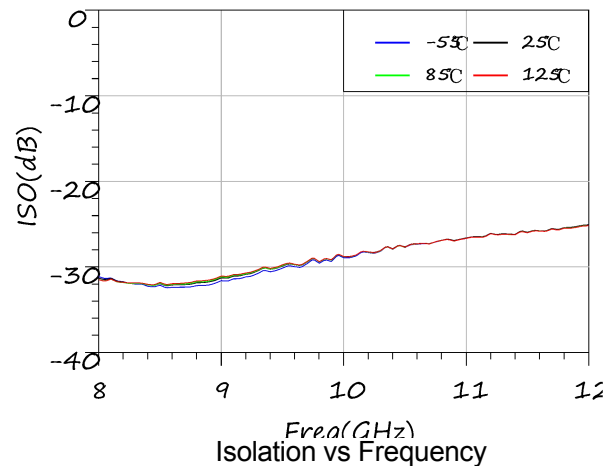
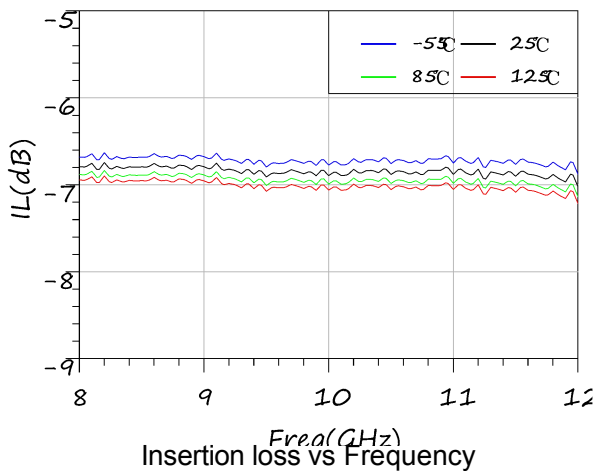
The MC17264 is a 0° two-way power divider which operates during 8.0-12.0 GHz. The typical insertion loss is 0.8dB and the isolation is 26dB.

The Chip applies the on-chip metallization through-hole technology thus no need for additional grounding measures which makes it easy and convenient to use. The backside of the chip is metallized, suitable for conductive adhesive bonding or eutectic mounting process.

Electrical Specifications (TA=+25°C, 50Ω system)

Parameter		Min.	Typ.	Max.	Unit
Frequency Range	Freq	8.0	-	12.0	GHz
Insertion Loss	IL	-	0.8	-	dB
Isolation	ISO	-	26	-	dB
Input Return Loss	RFCRL	-	-20	-	dB
Output Return Loss	RF1/RF2/RF3/RF4 RL	-	-18	-	dB

[1] The chips are 100% DC and RF tested.

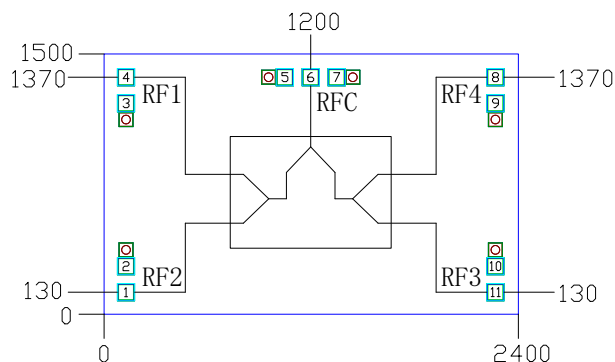
Typical Testing Characteristics


Absolute Maximum Ratings

Parameter Limits	Value
Input Power, 50Ω	30dBm
Storage Temperature	-65~+150°C
Operating Temperature	-55~+125°C
Mounting Temperature (30s, N ₂ Protection)	300°C
Exceeding the above conditions may cause permanent damage to the chip	



This product is ESD(Electrostatic discharge) sensitive. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

Outline Drawing


- Assembling in a clean environment.
- Avoiding rapid temperature changes during the mounting process.
- Do not touch the surface or use dry/wet chemical methods to clean the surface
- 2 bonding wires for input and output (in figure 八), the bonding wires should be as short as possible.
- Storing in a dry, N₂ protection environment.

Notes:

1. Unit: μm
2. Back Side Metallization: Gold
3. Back side metal is ground
4. Bonding pad size: 100 μm
5. Outline Dimensional Tolerance: ±50 μm

Pad Descriptions

Pad No.	Function	Description
6	RFC	RF signal input, 50Ω matched
1, 4, 8, 11	RF1	RF signal output, 50Ω matched
2, 3, 5, 7, 9, 10	GND	Grounding pad for probe test
Die Bottom	GND	Die bottom must be connected to RF/DC ground

Assembly Diagram
