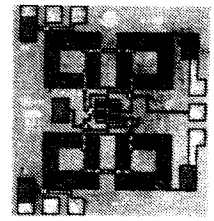
JUL 6 1992

HITTITE MICROWAVE CORPORATION

GaAs MMIC Double-Balanced 2 to 6 GHz Mixer

HMC115

PRELIMINARY DATA SHEET, DECEMBER 1991



Features

CONVERSION LOSS: 8dB

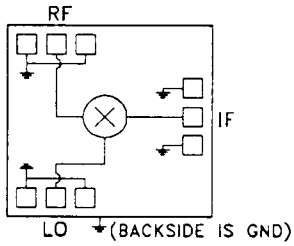
LO TO RF AND IF ISOLATION: 30dB

RF AND LO BANDWIDTH: 2 -6 GHz

General Description

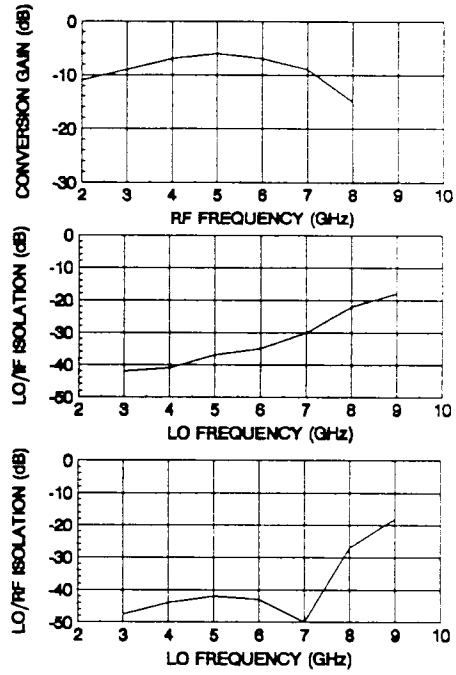
The HMC115 chip is a miniature double-balanced mixer which can be used as an Up-Converter or Down-Converter operating in C-band. The chip does not require DC bias, and is available in packaged format.

Schematic



Typical Performance

at a Fixed 1 GHz IF



Electrical Performance

PARAMETER	Typ.	Units
Frequency Range, RF & LO	2 - 6	GHz
Frequency Range, IF	DC - 6	GHz
Conversion Loss	8	dB
Noise Figure	8	dB
LO to RF Isolation	40	dB
LO to IF Isolation	30	dB
IP_3 (Input)	20	dBm
IP_2 (Input)	40	dBm
1 dB Gain Compression	10	dBm
Local Oscillator Drive Level	15	dBm
Operating Temperature	-55 to +125	deg. C
Size	1.3 x 1.3	mm

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