



E-Series I/Q Demodulator 9 – 11 MHz

EKIN2-10D V2

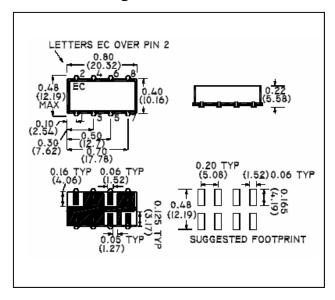
Features

- Excellent Phase and Amplitude Balance
- LO Power + 10 dBm Typical
- Surface Mount
- Tape and reel packaging available

Description

M/A-COM's EKIN2-10D is an I/Q Demodulator. Ideally suited for Direct Demodulation in Cellular Base Stations. Typical system applications include GSM, DCS1800, W-CDMA, and PCS air interfaces.Parts are packaged in tape & reel.

SM - 28 Package



Electrical Specifications: $T_A = 25$ °C, $Z_0 = 50\Omega$

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
LO & RF Frequency	_	9 - 11	MHz	_	_	_
Amplitude Unbalance	_	9 - 11	dB	_	0.2	0.4
Phase Unbalance	_	9 - 11	Degrees	_	1.5°	3°
3 * I/Q	_	9 - 11	dB	_	50	35
Conversion Loss	_	9 - 11	dB	_	6.0	7.0
(LO) Carrier Power	_	9 - 11	dBm	_	+10	_
LO VSWR	_	9 - 11	Ratio	_	4.5:1	_
RF VSWR	_	9 - 11	Ratio	_	1.1:1	_
I VSWR	_	9 - 11	Ratio	_	1.3:1	_

^{*} $Q = -90^{\circ}$ for RF < LO

Ordering Information

Part Number	Package
EKIN2-10DTR	Tape and Reel (300 piece Reel)

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[•] Europe Tel: 44.1908.574.200 / Fax: 44.1908.574.300

Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298





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Absolute Maximum Ratings 1

Parameter	Absolute Maximum		
DC Offset Voltage	1 mV Typical		
RF Power (1 dB Compression)	4 dBm Maximum		
Impedance	50 Ohms Nominal		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-55°C to +125°C		

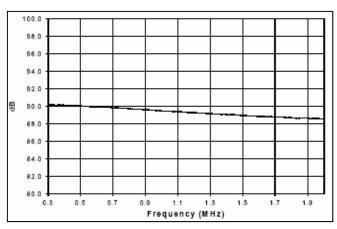
^{1.} Operation of this device above any one of these parameters may cause permanent damage.

Pin Configuration

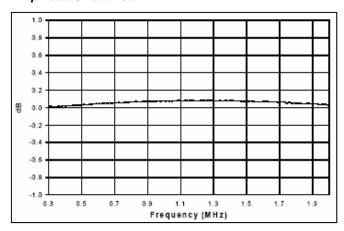
Pin No.	Function
1	LO
2	Case Ground
3	Case Ground
4	Case Ground
5	1
6	Q
7	Case Ground
8	RF

Typical Performance Curves

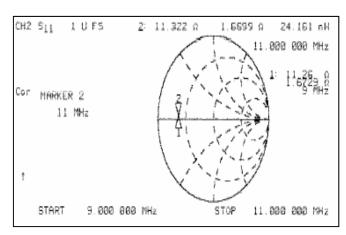
Phase Unbalance



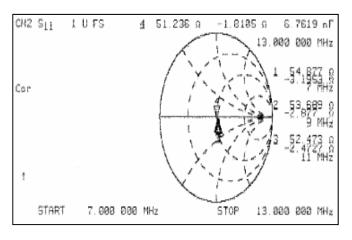
Amplitude Unbalance



LO VSWR



RF VSWR



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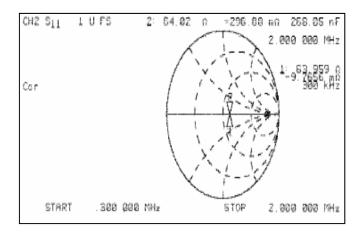


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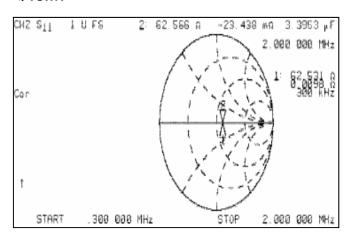
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Typical Performance Curves

I VSWR



Q VSWR



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