



E-Series I/Q Demodulator 70 MHz

EKIN2-70D V3

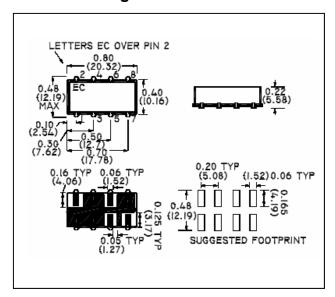
Features

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

Description

M/A-COM's EKIN2-70D is a passive, high performance surface mount Demodulator. It is ideally suited for IF 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	_	70	MHz	_	_	_
I/Q Frequency	_	DC - 5	MHz	_	_	_
Amplitude Unbalance	_	70	dB	_	0.2	1.0
Phase Unbalance	_	70	Degrees	_	0.5°	2°
LO to RF Isolation	_	70	dB	50	65	_
Conversion Loss	-	70	dB	_	8.0	9.0
(LO) Carrier Power	-	70	dBm	_	+10 ± 2	_

 $Q = I - 90^{\circ}$ for RF > LO

Ordering Information

Part Number	Package	
EKIN2-70DTR	Tape and Reel (300 piece Reel)	

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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		

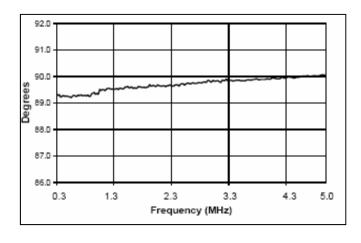
^{1.} Operation of this device above any one of these parameters may cause permanent damage.

Pin Configuration

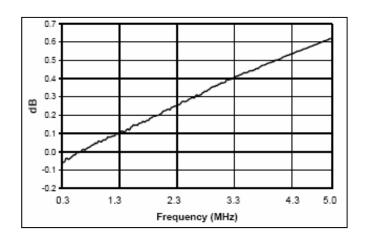
Pin No.	Function	
1	LO	
2	Case Ground	
3	Case Ground	
4	Case Ground	
5	I	
6	Q	
7	Case Ground	
8	RF	

Typical Performance Curves

Phase Unbalance



Amplitude Unbalance



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