



E-Series I/Q Modulator 921 — 960 MHz

EKIN2-960 V3

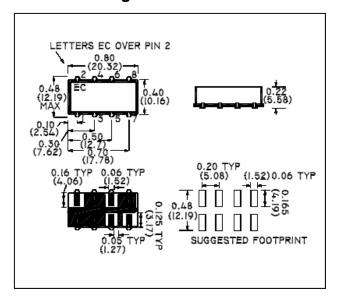
Features

- High Carrier Suppression
- High 3 I and 5 I Suppression
- LO Power + 10 dBm Typical
- Surface Mount
- · Tape and reel packaging available

Description

M/A-COM's EKIN2-960 is a passive, high performance surface mount Modulator. It is ideally suited for Direct Modulation in GSM / E-GSM Cellular Base Stations. 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 Frequency	_	921 - 960	MHz	_	_	_
I/Q Frequency	_	DC - 0.27	MHz	_	_	_
LO Carrier Suppression	When Q = +90 degrees relative to I; Lower sideband is suppressed. Related to wanted sideband power.	921 - 960	dBc	_	27	_
SSB Rejection		921 - 960	dBc	_	34	_
Harmonic Suppression 3 x I/Q		921 - 960	dBc	_	40	_
Harmonic Suppression 5 x I/Q		921 - 960	dBc	_	55	_
Conversion Loss	_	921 - 960	dB	_	_	10
(LO) Carrier Power	_	921 - 960	dBm	_	+10 ± 1	_
I/Q Drive Level	_	921 - 960	dBm	_	-10	_

Ordering Information

Part Number	Package	
EKIN2-960TR	Tape and Reel (300 piece Reel)	

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EKIN2-960

Absolute Maximum Ratings 1

Parameter	Absolute Maximum		
Impedance	50 Ohms Nominal		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-55°C to +125°C		
Pin Temperature (10 seconds)	260°C		

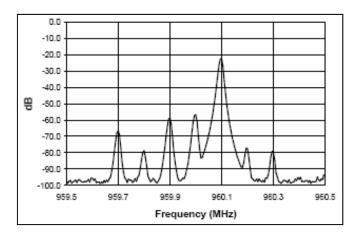
^{1.} Operation of this device above any one of these parameters may cause permanent damage.

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

Harmonic Suppression



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