

E-Series I/Q Modulator 921 — 960 MHz



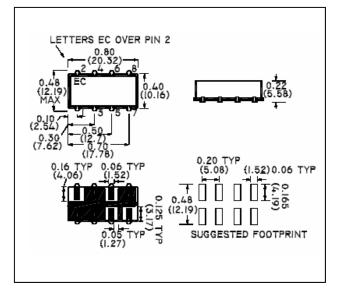
Features

- 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: $T_A = 25^{\circ}C$, $Z_0 = 50\Omega$

Parameter	Test Conditions	Frequency	Units	Min	Тур	Мах
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. Re- lated 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)	

- North America Tel: 800.366.2266 / Fax: 978.366.2266
- 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 Ratings¹

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

-70.0 -80.0 -90.0 -100.0 959.5

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Harmonic Suppression

959.9

Frequency (MHz)

960.1

960.3

960.5

959.7

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