



E-Series I/Q Modulator 921 — 960 MHz

**EKIN2-960 V**3

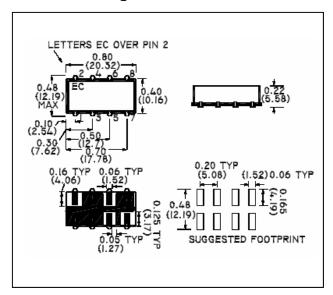
#### **Features**

- 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)

<sup>•</sup> North America Tel: 800.366.2266 / Fax: 978.366.2266

<sup>•</sup> 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		
Impedance	50 Ohms Nominal		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-55°C to +125°C		
Pin Temperature (10 seconds)	260°C		

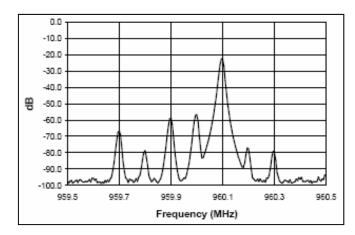
<sup>1.</sup> Operation of this device above any one of these parameters may cause permanent damage.

# **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**

#### Harmonic Suppression



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