

**E-Series I/Q Modulator**  
921 — 960 MHz

**EKIN2-960**  
V3

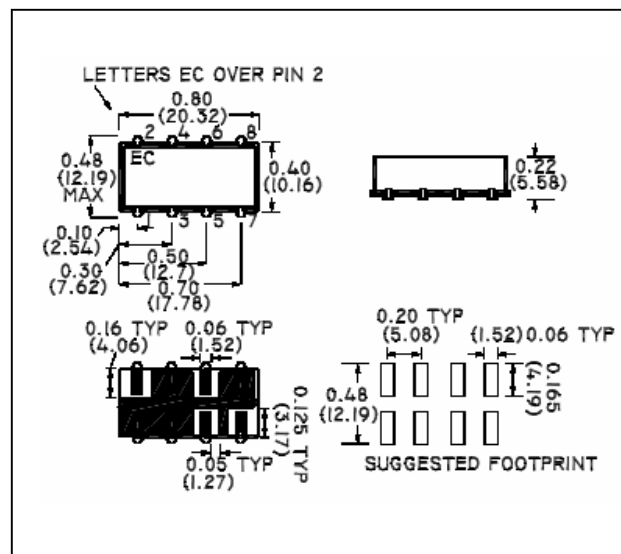
**Features**

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

Parameter	Test Conditions	Frequency	Units	Min	Typ	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)

### Absolute Maximum Ratings <sup>1</sup>

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

