

# E-Series I/Q Modulator

## 935.2 – 959.8 MHz

EKIN2-960

V4

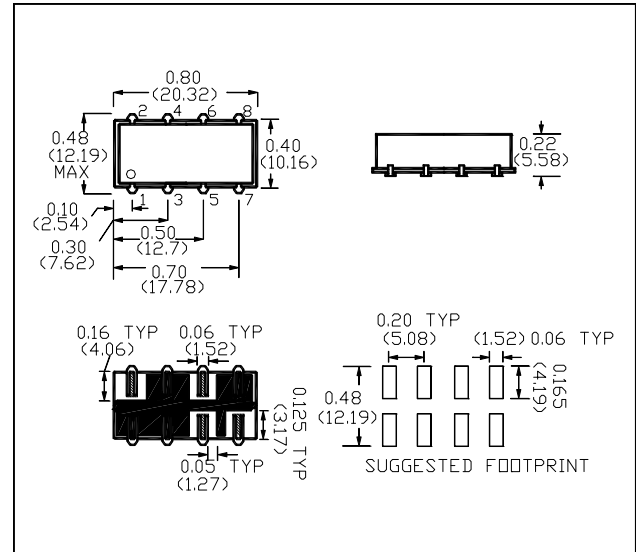
### Features

- 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: $T_A = 25^\circ\text{C}$ , $Z_0 = 50\Omega$ , LO = +10 dBm

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
LO Frequency	—	935.2 - 959.8	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.	935.2 - 959.8	dBc	—	27	—
SSB Rejection		935.2 - 959.8	dBc	—	34	—
Harmonic Suppression 3 x I/Q		935.2 - 959.8	dBc	—	40	—
Harmonic Suppression 5 x I/Q		935.2 - 959.8	dBc	—	55	—
Conversion Loss	—	935.2 - 959.8	dB	—	—	10
(LO) Carrier Power	—	935.2 - 959.8	dBm	—	+10 ± 1	—
I/Q Drive Level	—	935.2 - 959.8	dBm	—	-10	—

### Ordering Information

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

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

Parameter	Absolute Maximum
Impedance	50 Ohms nominal
Operating Temperature	-55°C to +85°C
Storage Temperature	-65°C to +125°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

### 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

#### Conversion Loss

