

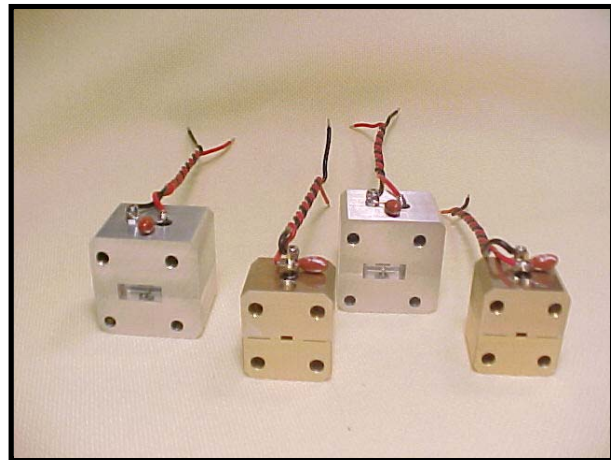
## Low Cost K and Ka Band Gunn Diode Oscillators

### FEATURES:

- ❖ Fix or mechanically tuned
- ❖ Excellent frequency and power stability
- ❖ Extremely high external Q
- ❖ Very low phase noise
- ❖ Self locking tuning mechanism

### APPLICATIONS:

- ❖ Police speed radar guns
- ❖ Doppler sensors
- ❖ Transceivers



**CMG Series**

### DESCRIPTION:

**CMG Series** K and Ka band Gunn diode oscillators are especially designed for low cost commercial applications. Unlike most manufacturers' product, these oscillators are made of high performance devices and machined aluminum cavity. Due to extremely high external Q and temperature compensation mechanism, these oscillators exhibit higher frequency and power stability, lower phase noise and higher anti-load-pulling ability. The oscillators are ideal candidates for the applications such as Police Speed Radar Guns and Doppler Sensors, where low close-in phase noise is required.

### SPECIFICATIONS:

Typical Specifications	
K Band (Model No.: CMG-42240110-31)	Ka Band (Model No.: CMG-28350110-32)
Center frequency: 24.125 GHz	Center frequency: 35.000 GHz
Power Output: +10 dBm (minimum)	Power Output: +10 dBm (minimum)
Mechanical tuning range: $\pm 500$ MHz (minimum)	Mechanical tuning range: $\pm 500$ MHz (minimum)
$\Delta F/\Delta T$ : -0.40 MHz/ $^{\circ}$ C (maximum, -40 to +85 $^{\circ}$ C)	$\Delta F/\Delta T$ : -0.40 MHz/ $^{\circ}$ C (maximum, -40 to +85 $^{\circ}$ C)
$\Delta P/\Delta T$ : -0.03 dB/ $^{\circ}$ C (maximum, -40 to +85 $^{\circ}$ C)	$\Delta P/\Delta T$ : -0.04 dB/ $^{\circ}$ C (maximum, -40 to +85 $^{\circ}$ C)
Phase noise: -95 dBc/Hz @ 100 KHz offset	Phase noise: -95 dBc/Hz @ 100 KHz offset
Flange: UG595/U (through holes, 4-40)	Flange: UG599/U (through holes, 4-40)

### OUTLINES

