

### WR 28 Bias Tuned Gunn oscillator G28I-T35 - F

The unit utilises a GaAs Gunn device in a waveguide cavity.  
The frequency can be adjusted using the applied bias voltage.

The module provides a convenient way of generating an RF signal using a solid state device  
A clean and stable DC power supply will enhance performance and spectral purity

#### Applications:-

**Educational**  
**Communications**  
**Research**  
**Imaging/sensors**

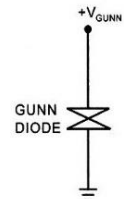
Frequency (GHz)	Power (dBm)	Voltage (Volts)	Bandwidth (MHz)
35	10	5.0	10
35	13	5.0	10
35	15	5.0	10
35	17	5.0	10
35	20	5.0	10
35	22	5.0	10
35	23	5.0	10



#### Alternative centre frequency available

Specifications at + 32°C case temperature

**DC input** : Pin or solder pad  
**RF output** : UG-599/U flange compatible  
**Fixing** : Through Holes  
**Material** : Brass



**Note:** Customised performance and outline envelope available e.g. greater bandwidth, smaller outline/ mass.

## WR 28 Mechanically Tuned Gunn oscillator - G28I-T35 -M

The unit utilises a GaAs Gunn device and a friction locked tuning screw located in a waveguide cavity. The tuning screw allows adjustment of the frequency by altering the electrical length of the waveguide cavity.

**This circuit is ideal for a robust solution for volume manufacture.**

The bias tuning voltage allows a convenient way to alter the frequency of operation; high modulation schemes can be applied thus enabling frequency agility.

A clean and stable DC power supply will enhance performance and spectral purity

### Applications:-

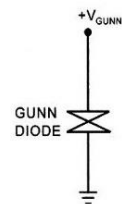
Educational  
Communications  
Research  
Imaging/sensors

Frequency (GHz)	Power (dBm)	Voltage (Volts)	Bandwidth (MHz)				
			Mechanical			Bias	
35	10	5.0	100	200	500	1000	10
35	13	5.0	100	200	500	1000	10
35	15	5.0	100	200	500	1000	10
35	17	5.0	100	200	500	1000	10
35	20	5.0	100	200	500	1000	10
35	22	5.0	100	200	500		5
35	23	5.0	100	200			5

### Alternative centre frequency available

Specifications at + 32°C case temperature

**DC input** : Pin or solder pad  
**RF output** : UG-599/U flange compatible  
**Fixing** : Through Holes  
**Material** : Brass



**Note:** Customised performance and outline envelope available e.g. greater bandwidth, smaller outline/ mass.

## WR 28 Varactor Tuned Gunn oscillator - G28I-T35 -V

The unit utilises a GaAs Gunn device, a GaAs varactor diode and a friction locked tuning screw.

The varactor diode provides fine frequency adjustment remotely by the application of a DC tuning voltage

The friction locked tuning screw allows coarse adjustment of the frequency

**This circuit is ideal for a robust solution for volume manufacture.**

The tuning voltage allows a convenient way to alter the frequency of operation; high modulation schemes can be applied thus enabling frequency agility.

A clean and stable DC power supply will enhance performance and spectral purity

### Applications:-

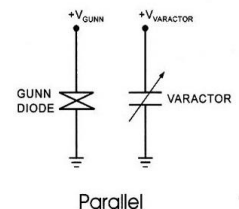
Educational  
Communications  
Research  
Imaging/sensors

Frequency (GHz)	Power (dBm)	Voltage (Volts)	Bandwidth (MHz)		Tuning voltage
			Electronic	Mechanical	(Volts)
35	10	5.0	100	200	100
35	13	5.0	100	200	100
35	15	5.0	100	200	100
35	17	5.0	100	200	100
35	20	5.0	100	200	100
35	22	5.0	100	200	100
35	23	5.0	100	200	100

### Alternative centre frequency available

Specifications at + 32°C case temperature

**DC input** : Pin or solder pad  
**DC tuning** : Pin or solder pad  
**RF output** : UG-599/U flange compatible  
**Fixing** : Through Holes  
**Material** : Brass



**Note:** Customised performance and outline envelope available e.g. greater bandwidth, smaller outline/ mass.