

Applications:

- Microwave and Millimeter Local Oscillators
- Transmitter Sources
- Instrumentations

Features:

- Mechanical, Varactor and Bias Tuned
- Various Bandwidth Coverage
- Low Level Harmonics and spurious
- Low Phase Noise
- Coax or Waveguide RF connectors



Descriptions:

3J Microwave, Inc. offers a complete line of Gunn diode oscillators in frequency range of 18 to 110 GHz. The available state-of-the-art solid-state technologies, various tuning techniques and circuitry are utilized in the Gunn diode oscillators to meet various requirements. Coax RF connectors are available in the frequency range below 67 GHz. Waveguide connectors are also designed to cover eight waveguide bands from K to W-Band in the frequency range of 18 to 110 GHz. The

series Gunn diode oscillators are designed for the various applications such as local oscillators for Receivers, Transmitters and transceivers, instrumentations and transmitter sources etc. The series Gunn diode oscillators are sorted in the three categories of **GMTO** series mechanical tuned Gunn oscillators, **GVTO** series varactor tuned Gunn oscillators and **GBTO** series bias tuned Gunn oscillators.

GMTO Series Mechanical Tuned Gunn Oscillator Specifications:

Model Number*	Freq (GHz)	Mech Tuning (%)	Pout (dBm)	Phase Noise (dBc)		Spurious/Harmonics (dBc)	Freq Stability (PPM) **	DC Bias (V/mA)	RF Output Connector	Outline
				@10KHz	@100KHz					
GMTO-xxxxxxx-00	18-27	0.08	10-30	76	96	Spurious: -70 Harmonics: -25	± 1	Voltage: +8V, or +12V or +15V Current: 300-1500mA	UG595-U	J01, J02
	22-33			75	95				UG595-UM	J03, J04
	26-40			72	92				UG383-U	J01, J02 J04
	33-50			72	92					
	40-60		72	92						
	50-75		70	90						
	60-90		67	87	UG387-U					
	75-110		67	87	UG387-UM					

* Please see "how to order" for the model number details

** Operating Temperature: -10 to +70°C

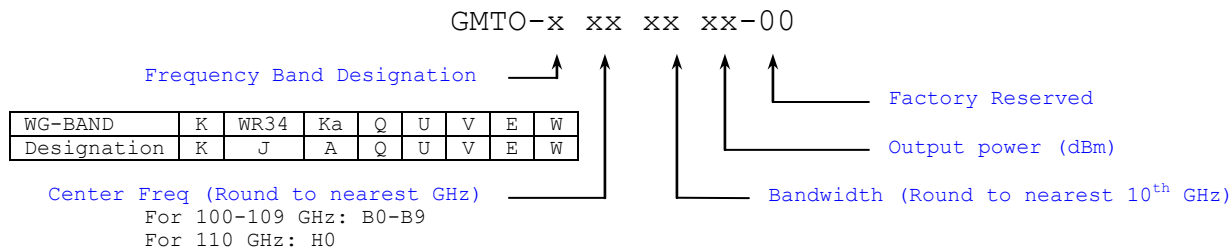


Section 3-7: GUNN Oscillator Series

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Frequency Coverage: 18 to 110 GHz

How to Order:



GMTO Model Number Example:

Model Number of a W-Band Mechanical Tuned Oscillator:

Specifications	Model number
RF Frequency: 96 GHz Mechanical Tuning Bandwidth: 2.0 GHz Output Power: 15 dBm	GMTO-W962015-00

GVTO Series Varactor Tuned Gunn Oscillator Specifications:

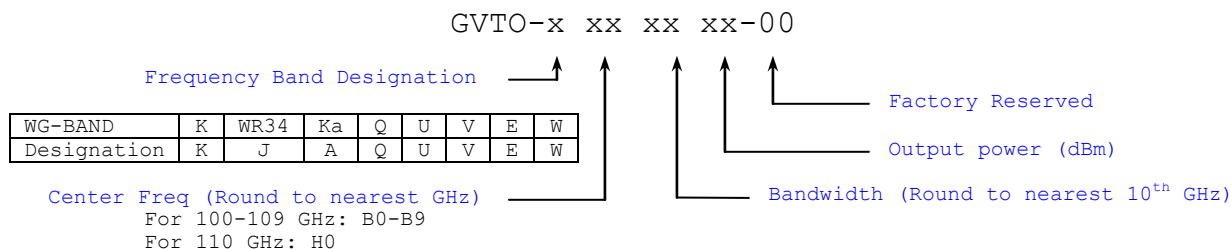
Model Number*	Freq (GHz)	Mech Tuning (%)	Pout (dBm)	Phase Noise (dBc)		Spurious/Harmonics (dBc)	Freq Stability (PPM)**	DC Bias (V/mA)	RF Output Connector	Outline
				@10KHz	@100KHz					
GVTO-xxxxxxx-00	18-27	0.08	10-30	76	96	Spurious: -70 Harmonics: -25	± 1	Voltage: +8V, or +12V or +15V Current: 300-1500mA	UG595-U	***
	22-33			75	95				UG595-UM	
	26-40			72	92				UG599-U	
	33-50			72	92				UG383-U	
	40-60		10-23	72	92				UG383-UM	
	50-75			70	90				UG385-U	
	60-90			67	87				UG387-U	
	75-110			67	87				UG387-UM	

* Please see "how to order" for the model number details

** Operating Temperature: -10 to +70°C

***Consult the factory

How to Order:



GVTO Model Number Example:

Model Number of a E-Band Varactor Tuned Oscillator:

Specifications	Model number
RF Frequency: 75 GHz Varactor Tuning Bandwidth: 1.0 GHz Output Power: 13 dBm	GVTO-E751013-00



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Frequency Coverage: 18 to 110 GHz

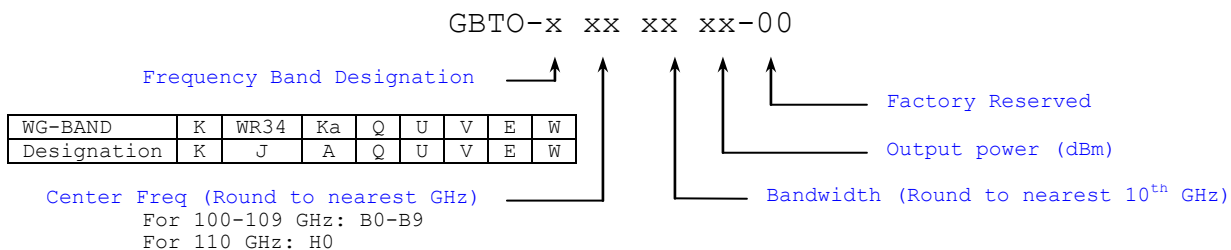
GBTO Series Bias Tuned Gunn Oscillator Specifications:

Model Number*	Freq (GHz)	Mech Tuning (%)	Pout (dBm)	Phase Noise (dBc)		Spurious/Harmonics (dBc)	Freq Stability (PPM)**	DC Bias (V/mA)	RF Output Connector	Outline
				@10KHz	@100KHz					
GBTO-xxxxxxx-00	18-27	0.08	10-30	76	96	Spurious: -70 Harmonics: -25	± 1	Voltage: +8V, or +12V or +15V Current: 300-1500mA	UG595-U	J01, J02
	22-33			75	95				UG595-UM	J03, J04
	26-40			72	92				UG599-U	
	33-50			72	92				UG383-U	J01, J02
	40-60		10-23	72	92				UG383-UM	J04
	50-75			70	90				UG385-U	
	60-90			67	87				UG387-U	
	75-110			67	87				UG387-UM	

* Please see "how to order" for the model number details

** Operating Temperature: -10 to +70°C

How to Order:



GBTO Model Number Example:

Model Number of a V-Band Bias Tuned Oscillator:

Specifications	Model number
RF Frequency: 62.5 GHz Varactor Tuning Bandwidth: 100 MHz Output Power: 16 dBm	GBTO-V630116-00

Outline: Consult the Factory