

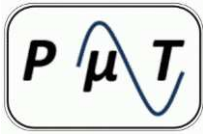
# PRINCETON MICROWAVE TECHNOLOGY INC.


*The SOURCE For High Performance Frequency Source*

DIELECTRIC RESONATOR OSCILLATORS	PmT DRO-6000 Series
<b>FEATURES:</b> <ul style="list-style-type: none"> <li>■ Customer Specified Frequency</li> <li>■ Packaged MESFET or BJT devices</li> <li>■ Low Phase Noise</li> <li>■ Low Microphonics</li> <li>■ High Vibration Operation</li> <li>■ SMT Fabrication</li> <li>■ Internal Voltage Regulation</li> </ul>	

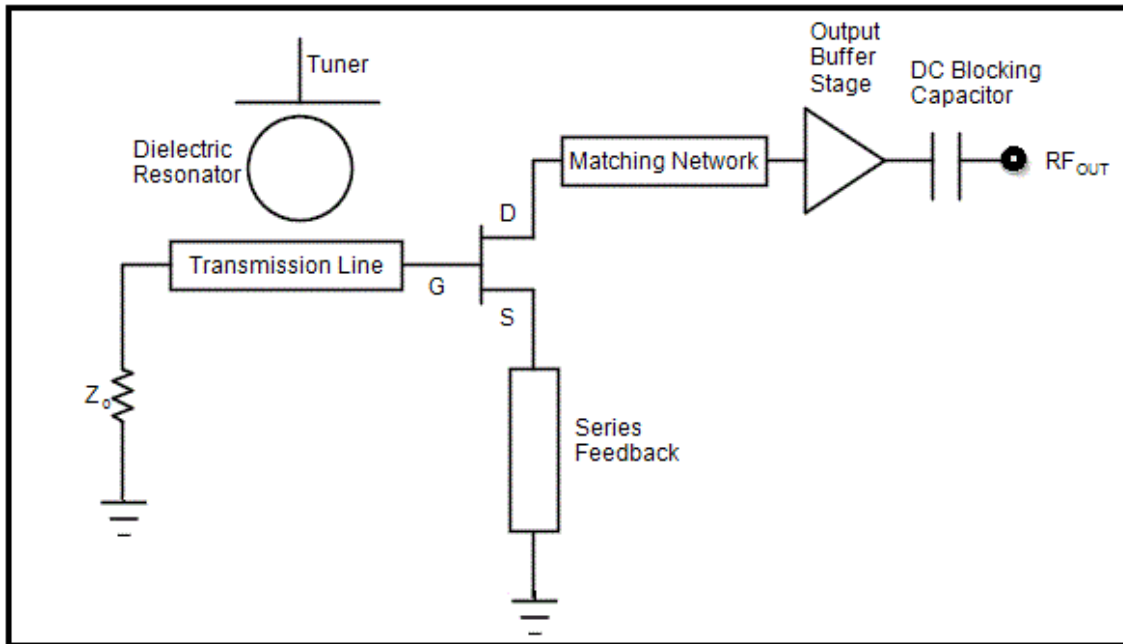
Parameters	Specifications	
<b>Model</b>	<b>6000 Series</b>	<b>6100 Series</b>
Frequency Range	18 to 40 GHz	18 to 40 GHz
<b>Tuning</b>	<b>Mechanical</b>	<b>Electrical</b>
Tuning Range, Min.	±10 MHz	±5 MHz
Power Output, Min.	13 dBm	13 dBm
Power Output, Max	3 dB	3 dB
Frequency Accuracy, Max.	0.1%	0.1%
Operating Temperature	-50 to +100 °C	-50 to +100 °C
Storage Temperature	-55 to +125 °C	-55 to +125 °C
Temperature Stability, Max.	±0.05%	±0.05%
Harmonics, Below Carrier, Max.	-20 dBc	-20 dBc
Spurious Output Below Carrier, Max.	-60 dBc	-60 dBc
Phase Noise <sup>1</sup>		
10 KHz offset	-80 dBc/Hz	-80 dBc/Hz
100 KHz offset	-95 dBc/Hz	-95 dBc/Hz
Input Voltage	+15±0.5 VDC	+15±0.5 VDC
Input Current, Max.	75 mA	75 mA
Connector	SMA Female standard	SMA Female standard
Weight, Max.	3.0 oz.	3.0 oz.
Size	See Outline	See Outline
Order Information	PmT-DRO-6000 Series- Frequency (GHz)	PmT-DRO-6100 Series- Frequency (GHz)

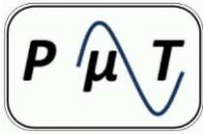
<sup>1</sup>See Phase Noise Plots



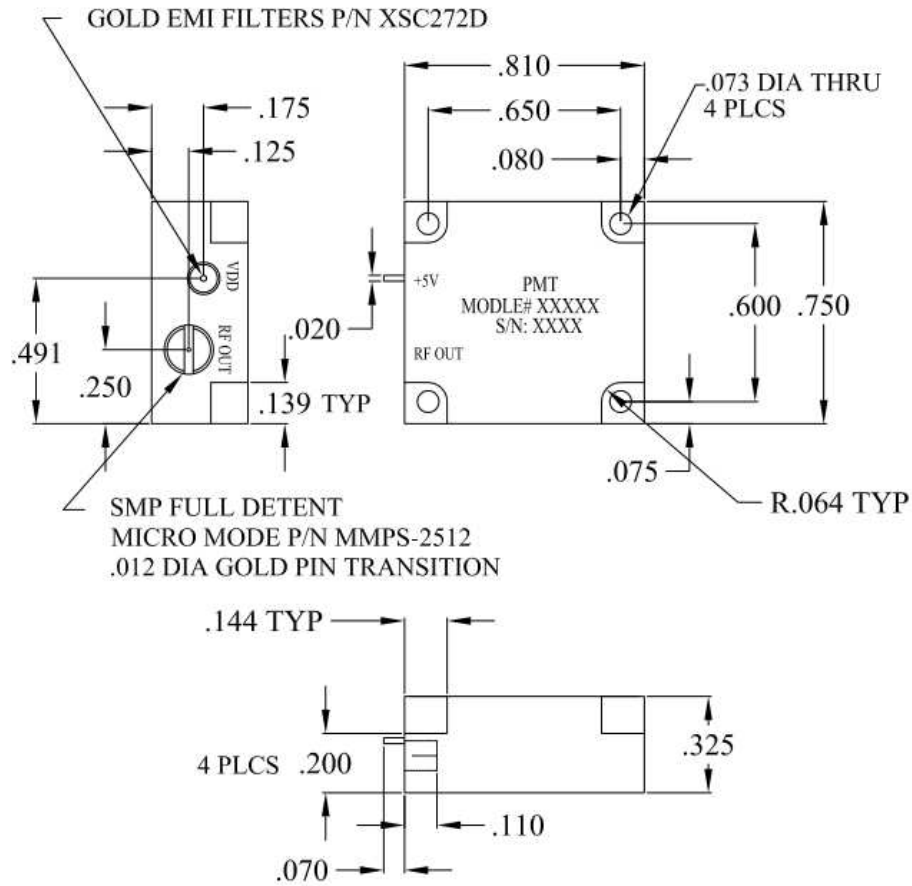
<p>DIELECTRIC RESONATOR OSCILLATORS</p>	<p>PmT DRO-6000 Series</p>
<p><b>FEATURES:</b></p> <ul style="list-style-type: none"><li>■ Customer Specified Frequency</li><li>■ Packaged MESFET or BJT devices</li><li>■ Low Phase Noise</li><li>■ Low Microphonics</li><li>■ High Vibration Operation</li><li>■ SMT Fabrication</li><li>■ Internal Voltage Regulation</li></ul>	

Block Diagram:

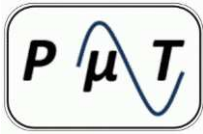




**Package:**



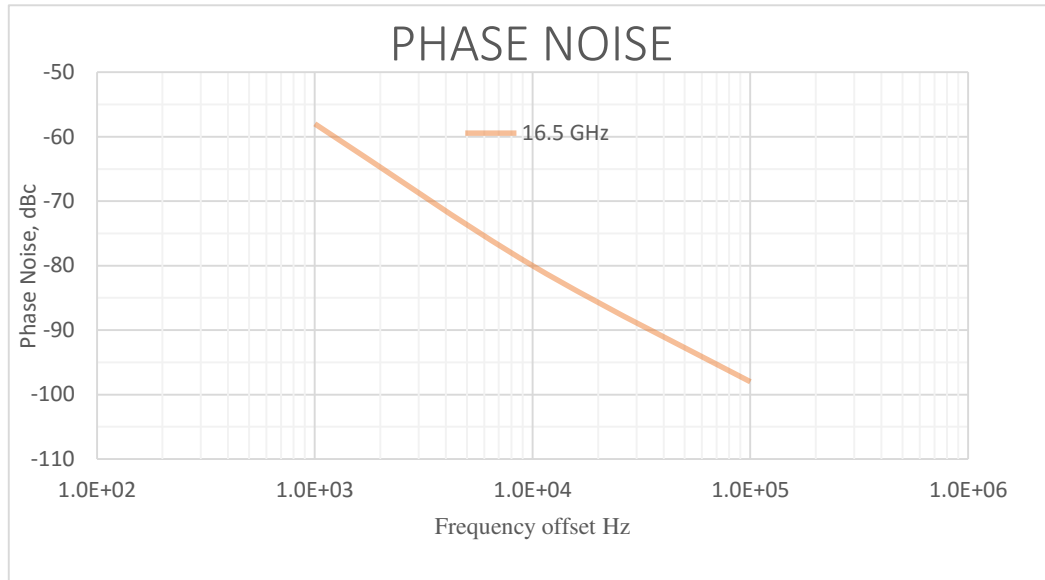
(Next page)

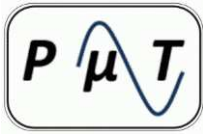


PRINCETON MICROWAVE TECHNOLOGY INC.

*The SOURCE For High Performance Frequency Source*

### Typical Phase Noise Performance





DIELECTRIC RESONATOR  
OSCILLATORS

PmT DRO-6000 Series

**Options:**

1. Removable SMA Connectors
2. GPO Shroud
3. High Power Output
4. Custom Configurations

Dimensions:							
Frequency	Case Style	Dimension					
		A	B	C	D	E	F
3-5 GHz	PmT-100	1.00	2.75	2.00	1.78	2.53	0.90
5-8 GHz	PmT-200	0.800	2.75	1.60	1.38	2.53	0.90
8-16 GHz	PmT-300	0.675	1.75	1.35	1.13	1.53	0.65
16-20 GHz	PmT-400	0.800	2.75	1.60	1.38	2.53	0.64
20-40 GHz	PmT-400	0.800	2.75	1.60	1.38	2.53	0.64

\*in inches unless specified.

