STEP RECOVERY DIODE COMB (HARMONIC) GENERATORS

0.1 – 26 GHz

FEATURES

- Broadband Output Frequency Spectrum (from second harmonic to 26 GHz)
- No Bias Required
- Input Matched to 50 Ohms
- Very Low Phase Noise
- Hermetically Sealed Module
- Available in Drop-In Type Package
- Custom Input Freq Available From 10MHz to 10GHz
- Option for Enhanced Assembly for Severe Vibration Environment

APPLICATIONS

- Impulse Generator
- Frequency Multipliers
- Frequency Synthesizers
- Built-In-Self-Test Sources

ENVIRONMENTAL RATINGS

Max Input Power……..…… 1 Watt
Operating Temperature…….…… -55ºC to +95ºC
Storage Temperature…….…….... -65ºC to +150ºC
Temperature Cycling…….……..…… -65ºC to +150ºC
Shock……..……1500 G, 0.5 msec; 50 G, 11 msec
Vibration..……..……..…..…… 20 G, 100 to 2,000 Hz
Acceleration…….....…….....…… 10,000 G

Specifications: (@ +25°C, 0.5 Watt Input)

MODEL [1]	INPUT [2] FREQ. (MHz)	MAX INPUT VSWR	MINIMUM OUTPUT POWER PER PICKET (dBm)					OUTLINE OPTIONS
			UP to 4 GHz [3]	4-8 GHz	8-12.4 GHz	12.4-18 GHz	18-26 GHz	
GC100**	100	2:1	-10	-20	-30	-40	----	C,L,Y
GC200**	200	2:1	-5	-15	-25	-35	----	C,L,Y
GC250**	250	2:1	0	-10	-20	-30	----	C,L,Y
GC500**	500	2:1	+5	-5	-15	-20	----	C,L,Y
GC1000**	1000	2:1	+5	0	-10	-15	----	C,L,Y
GC0526**	500	2:1	+5	-5	-15	-20	-40	C,L,Y
GC1026**	1000	2:1	+5	0	-10	-15	-35	C,L,Y
GC1526**	1500	2:1	+5	0	-5	-10	-25	C,L,Y
GC2026**	2000	2:1	+5	+5	0	-10	-20	C,L,Y

Note 1: Suffix (**) specify options for internal DC return and package style. First Position: N indicates no DC return and R indicates internal DC return included. Note that DC Return is required for proper operation. Second Position: C, L, or Y indicates Package style (see outline drawings page)
Note 2: Other input frequencies from 10 MHz to 10 GHz are available. Contact factory for information.
Note 3: For second harmonics up to 4 GHz the fundamental feedthrough is typically +15dBm.
Note 4: All units can respond to a 3% bandwidth of input frequency without noticeable degradation.
Note 5: All models can be modified for use as an impulse generator. Consult factory for information on output amplitude, polarity, and pulse width.
Note 6: Add "X" to final suffix for an enhanced assembly version for more severe vibration environment.

For Package Outlines see Outline Drawings Page

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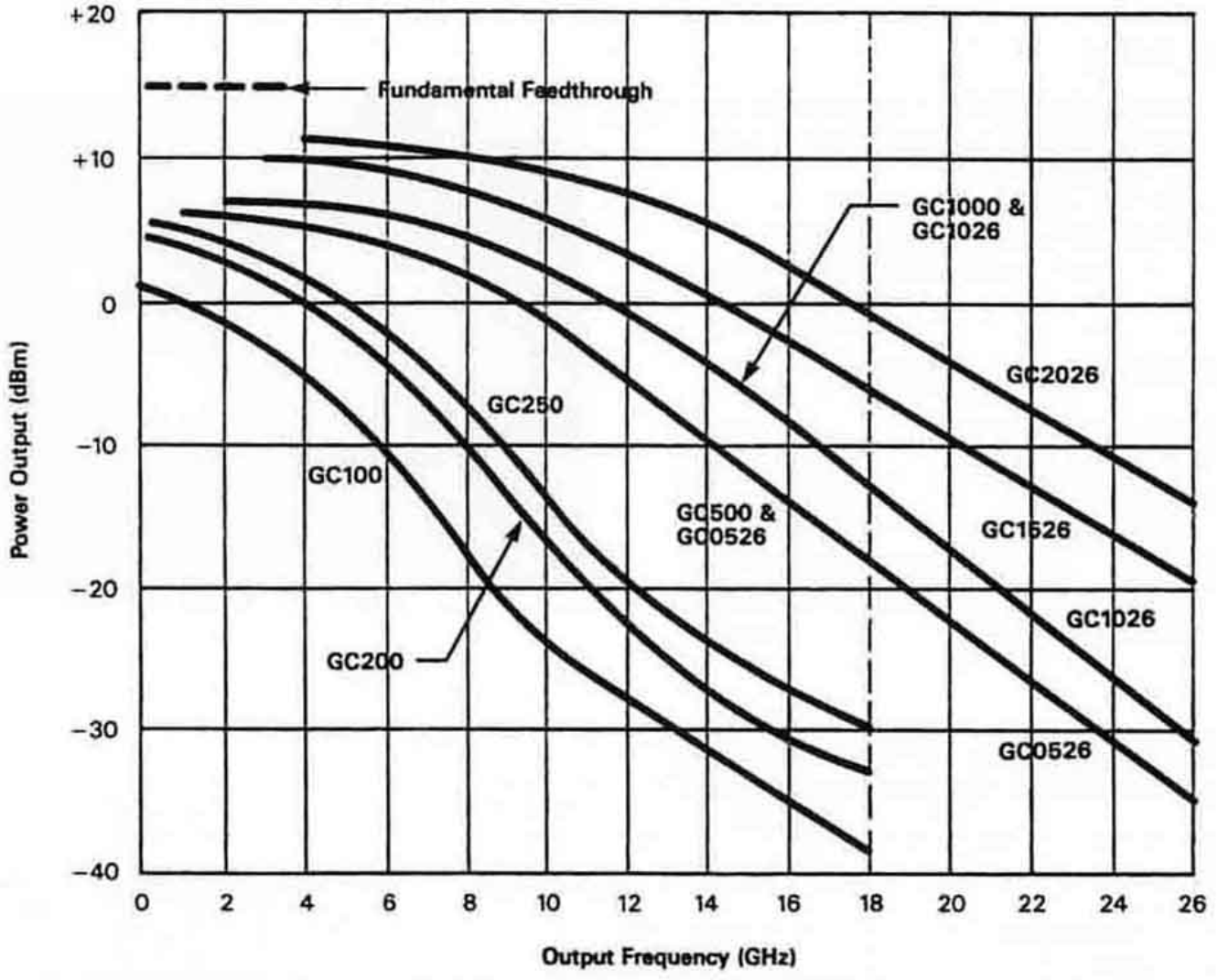
TYPICAL OUTPUT POWER SPECTRUM ENVELOPE



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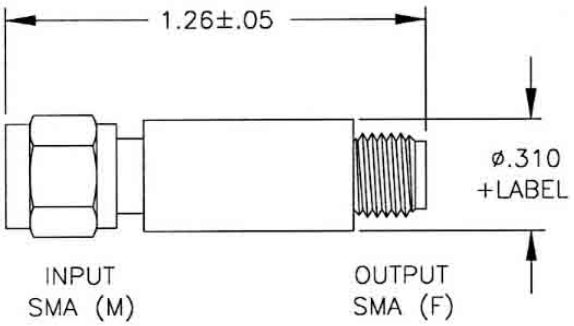
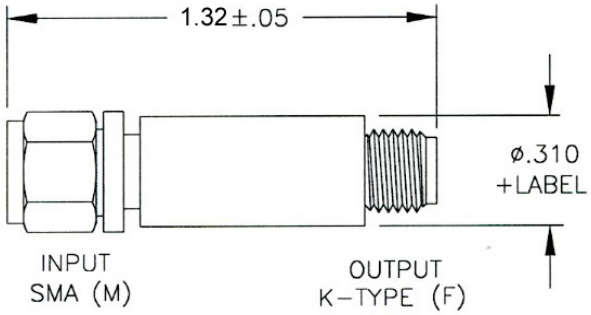
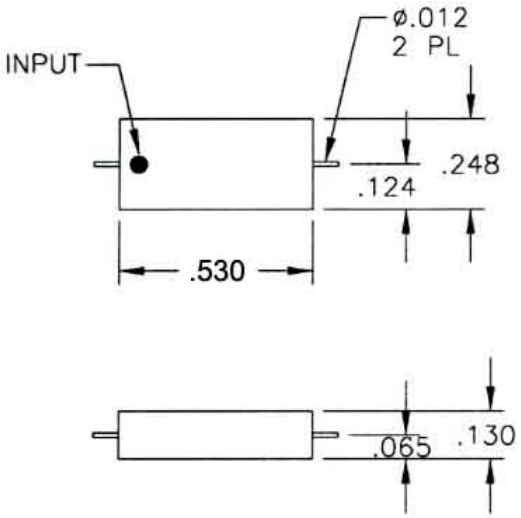
COMB GENERATOR OUTLINE DRAWINGS



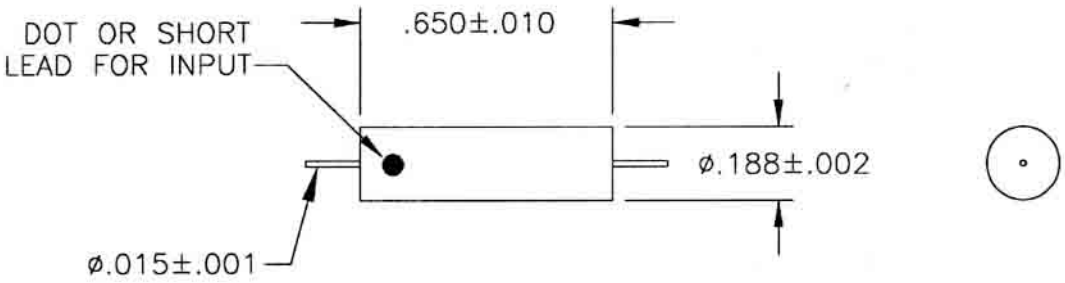
OUTLINE C



OUTLINE C2



OUTLINE L



OUTLINE Y

NOTE: BLACK DOTS SHOWN INDICATE RF INPUT