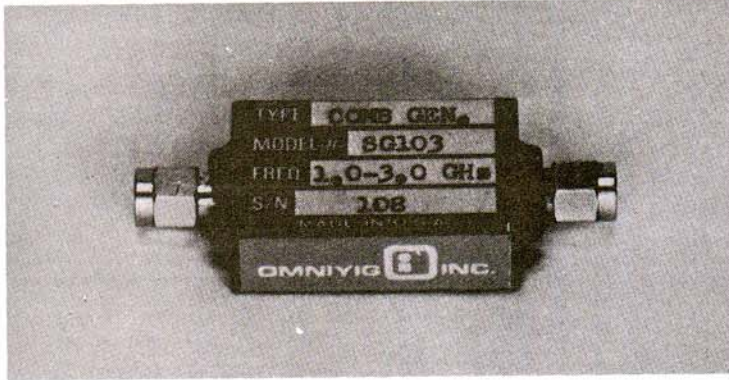


COMB GENERATORS



APPLICATION

- Spectrum Analysis
- Sweep Generators
- ECM Receivers
- Frequency Synthesizers
- Broadband Test Equipment
- Telemetry
- Communication Equipment

FEATURES

- Low Harmonic Conversion Loss
- Spectrum Purity
- Repeatable RF performance from unit to unit
- Small packaging
- Input matched for input broad band tuning
- Internal self biasing and DC return

DESCRIPTION

These are Omniyig's new standard matched comb generator designs. All units are self biased and have integrated elements to produce harmonics up to 18 GHz. The input of each comb generator is matched to 50 ohms with an integrated wide-transformer circuit, in which the device can accept a tunable input frequency.

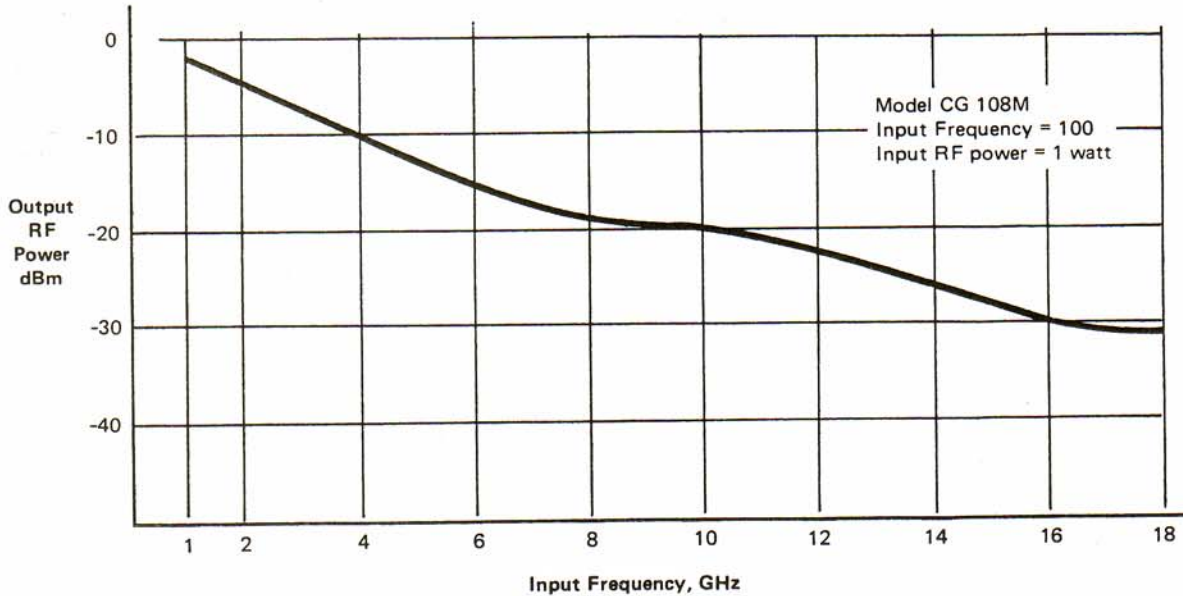
ENVIRONMENTAL

Maximum Power Rating 1 watt
Operating Temperature -55°C to +75°C
Storage Temperature -65°C to 110°C
Vibration 20 G 100 to 2000 Hz
Shock 50 G 11 mSec

ELECTRICAL CHARACTERISTICS

1. Power variation vs temperature is typically ± 1 dB over the temperature range -55°C to +75°C.
2. Maximum input power 1 watt at 25°C. Derated linearly to 0 at 100°C.
3. Input VSWR: The input VSWR as an option can be held to 2:1 up to 7% of the bandwidth and 3:1 up to 20% of the bandwidth.
4. Fundamental feedthrough +2 dBm.
5. Bias: The comb generator requires no external biasing. Each generator is provided with internal integrated proportional biasing.

ACTUAL COMB GENERATOR RF OUTPUT PERFORMANCE MODEL CG108M



SPECIFICATIONS @ 25°C

Input Frequency (MHz)	Omniiyg Model No.	Output Freq. Range GHz	Input(2) VSWR (Max)	Min RF Output(1) Power (dBm)
100-200 ⁽³⁾	CG111	0.1-12 GHz	2.0:1	-24 (at 12 GHz)
100	CG108S	0.1-4.0	1.8:1	-8
100	CG108C	4.0-8.0	1.8:1	-18
100	CG108X	8.0-12.4	1.8:1	-28
100	CG108Ku	12.4-18.0	1.8:1	-38
100	CG108M	1.0-18.0	1.8:1	-38
200	CG208S	0.2-4.0	1.8:1	-3
200	CG208C	4.0-8.0	1.8:1	-13
200	CG208X	8.0-12.4	1.8:1	-21
200	CG208Ku	12.4-18.0	1.8:1	-31
200	CG208M	2.0-18.0	1.8:1	-33
250	CG258S	0.25-4.0	1.8:1	+2
250	CG258C	4.0-8.0	1.8:1	-8
250	CG258X	8.0-12.4	1.8:1	-18
250	CG258Ku	12.4-18.0	1.8:1	-28
250	CG258M	2.0-18.0	1.8:1	-30
500	CG508S	1.0-4.0	1.8:1	+7
500	CG508C	4.0-8.0	1.8:1	-3
500	CG508X	8.0-12.4	1.8:1	-13
500	CG508Ku	12.4-18.0	1.8:1	-22
500	CG508M	1.0-18.0	1.8:1	-23
1000	CG100S	1.0-4.0	1.8:1	+8
1000	CG100C	4.0-8.0	1.8:1	+2
1000	CG100X	8.0-12.4	1.8:1	-8
1000	CG100Ku	12.4-18.0	1.8:1	-16
2000	CG200S	2.0-4.0	1.8:1	+10
2000	CG200C	4.0-8.0	1.8:1	+5
2000	CG200X	8.0-12.4	1.8:1	+4
2000	CG200Ku	12.4-18.0	1.8:1	-12
2000	CG200M	2.0-18.0	1.8:1	-15

- Notes: 1) Input RF power 0.5 watt min and 1.0 watt max
 2) Internal DC return is provided for all units
 3) Continues

