



FEATURES:

- 0.2Hz to 20MHz frequency Range
- 10mV to 20V pk-pk from 50Ω
- TTL/CMOS auxilliary output
- DC offset control with zero detent
- Variable symmetry control
- External sweep input

SPC-F004.DWG

TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.	DRAWN BY:	DATE:	DRAWING TITLE: 20MHz Function Generator				
	Jeff McVicker	10/25/02					
	CHECKED BY:	DATE:	SIZE A	DWG. NO. 72-6859	ELECTRONIC FILE 19C7731.dwg		REV A
	Hisham Odish	10/25/02					
	APPROVED BY:	DATE:					
	John Cole	10/25/02					
SCALE: NTS			U.O.M.: Millimeters [Inches]		 SHEET: 1 OF 2		

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Technical Specifications

FREQUENCY

Frequency Range: 0.2Hz to 20MHz in 8 overlapping decade ranges with fine adjustment by a vernier.

Vernier Range: >10:1 on each range.

Vernier Accuracy: Typically $\pm 5\%$ of full scale.

SWEEP MODE (EXTERNAL)

Input Impedance: 82 k Ω

Sweep Range: Typically > 20:1

Input Sensitivity: Typically 0 to 2V for 10:1 sweep

Max. Input Voltage: $\pm 10V$

Max. Slew Rate of sweep voltage: 0.1V/us

OPERATING MODES

(Specifications apply for the top decade of each frequency range and output 10V peak-to-peak into 50 Ω termination).

SINE

Distortion: Typically 2% on 200, 2k and 20k ranges.

Amplitude Flatness: $\pm 0.2dB$ to 200kHz; $\pm 2dB$ to 20MHz.

TRIANGLE

Linearity: Typically 99% on kHz ranges.

SQUAREWAVE

Rise and Fall Times: <22ns

DC

Range: $\pm 10V$ from 50 Ω

SYMMETRY

Symmetry Range: Typically variable from 1:6 to 6:1 up to 500kHz.

OUTPUTS

50 Ω

Three switch-selectable ranges with 26dB vernier control within each range.

0dB Range: 1V to 20V peak-to-peak (0.5V to 10V into 50 Ω).

-20dB Range: 100mV to 2V peak-to-peak (50mV to 1V into 50 Ω)

-40dB Range: 10mV to 0.2V peak-to-peak (5mV to 0.1V into 50 Ω)

DC Offset Range: $\pm 10V$ from 50 Ω . DC offset plus signal peak limited to

$\pm 10V$ ($\pm 5V$ into 50 Ω). DC offset plus waveform attenuated proportionally in -20dB and -40dB position.

TTL/CMOS

Capable of driving 4 standard TTL loads.

GENERAL

Power: 115V nominal 50/60Hz operating range $\pm 14\%$ of nominal; 30VA max. Installation Category II.

Operating Range: +5°C to + 40°C, 20% to 80% RH.

Storage Range: -10°C to +65°C

Environmental: Indoor use at altitudes to 2000m, Pollution Degree 1.

Electrical Safety: Complies with EN61010-1.

EMC: Complies with EN55011 and EN50082-1.

Size: 220(W) x 82(H) x 230(D) mm, (10.3 x 3.4 x 9.2") excluding feet.

Weight: 1.5 Kg (3.3lb).