TENMA®

SPC-F005.DWG

REVISIONS

DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1453	A	RELEASED	JWM	12/9/03	HO	12/19/04	JC	1/16/04

Features:

- 5HZ to 1300MHZ
- Press-to-Measure with Auto Power Down
- Hold Function
- Signal Activity Indicator
- Very High Sensitivity at all Frequencies
- Frequency and period measurement, 0.0001mHz resolution
- Reciprocal Counting Technique Gives Superior Accuracy
- Large 8 Digit Display with Full Range of Annunciators
- Low Battery Indicator

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Jeff McVicker	12/9/03
CHECKED BY:	DATE:
Hisham Odish	12/19/03
APPROVED BY:	DATE:
John Cole	1/16/04

DRAWING TITLE: 1.3GHz Hand Held Frequency Counter

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	72-6605	84N2131.dwg	A

SCALE: NTS | U.O.M.: Millimeters | SHEET: 1 OF 2

MEASUREMENT FUNCTIONS

Frequency (Range A)

Frequency Range: 5Hz to 25MHz
Resolution: 10-7Hz to 10Hz (see Note)
Accuracy: ±(1 digit + timebase error)

Frequency (Range B)

Frequency Range: 20MHz to 1.3GHz
Resolution: 1Hz to 1kHz (see Note)
Accuracy: ±(1 digit + timebase error)

Period

Frequency Range: 5Hz to 25MHz
Resolution: 10-7ns to 1us (see Note)
Accuracy: ± (1 digit + timebase error)

Note: *The resolution depends upon the measurement time and the input frequency. At least 7 digits are displayed per second of measurement time. Measurement time is selectable to be 0.1, 1, or 10 seconds.*

INPUT SPECIFICATIONS

Input A

Input Impedance: 1 Megohm//25pF
Frequency Range: 5Hz to 25MHz
Sensitivity: Sinewave 15mV rms 10Hz~20MHz
Max. Permissible Input Voltage: 200VDC; 250V rms 50Hz to 400Hz reducing to 1V rms above 1MHz

Noise Filter

For Input A, a low pass filter with a cut-off frequency of 50kHz is user selectable to ensure stable readings at low frequencies.

Input B

Input Impedance: 50 Ohms nominal
Frequency Range: 20MHz - 1.3GHz
Sensitivity: 10mVrms 20MHz - 700MHz, 50mV rms to 1.3GHz
Max. Permissible Input Voltage: 250VDC; 250V rms 50Hz to 400Hz, 1V rms 20MHz to 1.3GHz

DISPLAY

- No. of Digits: 8
- Size of Digits: 11.5mm (0.45")
- Annunciators: 15 annunciators

TIMEBASE

- Initial Error: ± 2ppm (10MHz crystal)
- Temperature Coefficient: Typically < ± 0.3ppm/°C for 18°C to 28°C and ± 10ppm for -20°C to 70°C
- Ageing Rate: < ± 5ppm/year

POWER REQUIREMENTS

- Battery Type: 9V PP3 alkaline *(Not included)*
- Battery Life: Typically 12 hours continuous or 3000 press-to-measure operations
- External Input: 6V-12V DC from approved AC adaptor or other DC source *(Not included)*

PHYSICAL & ENVIRONMENTAL

- Safety: Designed and manufactured to IEC1010-1
- Operating Range: +5°C to +40°C, 20% to 80% RH
- Storage Range: -20°C to +60°C
- Size: 81 x 178 x 30mm (W x L x D)
- Weight: 190g excluding battery

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