



## FG2C-UA Function Generator

### 3 MHz Function Generator

- Square, Triangle, Sine waves, TTL and CMOS pulse outputs
- 0.3 Hz to 3 MHz range
- Variable controlled frequency (VCF) input
- Duty-cycle control
- Variable output
- 2 switchable 20 dB attenuators
- Variable DC offset control
- Includes line cords and fuses for either 117 V or 220 V operation

## No hassle warranty

*No waiting.*

*No shipping  
charges.*



Our commitment to high-quality products and customer service is demonstrated by our industry exclusive "No Hassle" warranty. In the unlikely event that an Amprobe Test Tool requires warranty service, any of our local dealers are authorized to replace it, on the spot.

(note: \$500 MSLP limit)

This function generator provides a substantial array of output capabilities. It's extremely reliable for heavy day-to-day usage in electronic troubleshooting, production manufacturing test or as a breadboarding signal source.

The FG2C-UA function generator supplies all the basic test waveforms for fast, easy push-button selection of square, triangle and sine waves plus TTL or CMOS pulse output with low impedance, low distortion output. Smooth, analog knob dials frequency between 0.3 Hz and 3 MHz. Vary the output from less than 20mVp-p to 20Vp-p open circuit (10Vp-p max 50W load). Duty cycle control allows for setting pulses positive or negative. The VCF input allows external control for generating sweep signals.

#### Included Accessories

Test cables, spare fuses, 117 V line cord, 220 V line cord and users manual.



## FG2C-UA Function Generator

## Data Sheet

### General Specifications

|                        |                                                              |
|------------------------|--------------------------------------------------------------|
| Power source           | 115 V ac or 230 V ac, $\pm 15\%$ ; 50/60 Hz                  |
| Operating environment  | For indoor use, altitude up to 2000 m, 0 °C to 40 °C, 80 %RH |
| Storage environment    | -10 °C to 70 °C @70 %R.H.                                    |
| Dimensions (W x H x D) | 243 mm x 93 mm x 292 mm (9.57 in x 3.66 in x 11.5 in)        |
| Weight                 | 2.0 kgs (4.4 lbs)                                            |
| Safety approvals       | EN61010-1, Cat. II, Pollution degree 2                       |
| Warranty               | One-year                                                     |

### Specifications (at 23 °C; $\leq 70\%$ R.H.)

| Function             | Range                                                                                                                    | Accuracy                                         |
|----------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>Main</b>          |                                                                                                                          |                                                  |
| Frequency            | 0.3 Hz to 3 MHz (7 ranges)                                                                                               | $\pm 5\%$ , + 1 Hz (@ 3.0 position)              |
| Amplitude            | > 10 Vpp (into 50 $\Omega$ load)                                                                                         |                                                  |
| Impedance            | 50 $\Omega \pm 10\%$                                                                                                     |                                                  |
| Attenuator (knob)    | -20 dB                                                                                                                   | $\pm 1$ dB                                       |
| Attenuator (button)  | -20 dB                                                                                                                   | $\pm 1$ dB                                       |
| DC offset            | < -5 V to > +5 V (into 50 $\Omega$ load)                                                                                 |                                                  |
| Duty-cycle control   | 80 %:20 %:80 % to 1 MHz; continuously variable                                                                           |                                                  |
| <b>Sine Wave</b>     |                                                                                                                          |                                                  |
| Distortion           | 1 %, 0.3 Hz to 200 kHz<br>THD < 35 dB below fundamental in all ranges<br>(Specification applied from MAX. to 1/10 level) |                                                  |
| Flatness             | < 0.3 dB, 0.3 Hz to 300 kHz; < 0.5 dB, 300 kHz to 3 MHz                                                                  |                                                  |
| <b>Triangle Wave</b> |                                                                                                                          |                                                  |
| Linear               | $\geq 98\%$ , 0.3 Hz to 100 kHz; $\geq 95\%$ , 100 kHz to 3 MHz                                                          |                                                  |
| <b>Square Wave</b>   |                                                                                                                          |                                                  |
| Symmetry             | $\pm 2\%$ , 0.3 Hz to 100 kHz                                                                                            |                                                  |
| Rise or fall time    | $\leq 100$ ns at maximum output (into 50 $\frac{1}{2}$ load)                                                             |                                                  |
| <b>CMOS Output</b>   |                                                                                                                          |                                                  |
| Level                | 4 Vpp                                                                                                                    | $\pm 1$ Vpp to 14.5 Vpp $\pm 0.5$ Vpp adjustable |
| Rise or fall time    | $\leq 120$ ns                                                                                                            |                                                  |
| <b>TTL Output</b>    |                                                                                                                          |                                                  |
| Level                | $\geq 3$ Vpp                                                                                                             |                                                  |
| Fan out              | 20 TTL load                                                                                                              |                                                  |
| Rise or fall time    | $\leq 25$ ns                                                                                                             |                                                  |
| <b>VCF</b>           |                                                                                                                          |                                                  |
| Input Voltage        | -10 to +10                                                                                                               | $\pm 1$ V (100:1)                                |
| Input Impedance      | 10 k $\Omega$ , $\pm 10\%$                                                                                               |                                                  |

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