WA301 waveform amplifier - specification and description



APPLICATIONS

30V pk-pk from the WA301.

WA301 - Description and Specifications

WA301 - 30V pk-pk Waveform Amplifier

- Extends the output range of function generators
- 30 Volts peak to peak output swing
- DC to 1MHz bandwidth
- High impedance input, 0dB to +20dB gain
- ▶ 50 Ohm and 600 Ohm outputs
- 20dB swtitchable output attenuator
- Fully protected output



Most function generators have a maximum opencircuit output voltage of 20V peak to peak. The WA301

enables this to be boosted to 30V peak to peak.

Commonly the WA301 will be used as a slave to a function

generator with the gain set to x10. Thus an output of 3V pk-

pk at the function generator would give rise to an output of

provide an adjustable output level from a fixed level source.

Alternatively the variable gain facility might be used to

GENERAL DESCRIPTION

The WA301 is a DC to 1MHz amplifier with a maximum output (e.m.f.) of 30 volts peak to peak from a 50Ω source impedance. A 600Ω output is also provided.

The unit can provide up to 15 volts peak to peak into a 50Ω load and can drive up to 300mA peak into a low impedance or short circuit.

Fully variable gain between x1 and x10 is provided by a rotary vernier with calibrated end stops. A -20dB output attenuator is also incorporated.

An "output clip" LED is provided to warn if the output amplitude exceeds ±15V.

SPECIFICATIONS

Bandwidth: -3dB at 1MHz Flatness: -1dB at 400kHz Rise/fall time: <0.5µs Distortion: <0.1% at 1kHz Gain: Vernier adjustment between x1 and x10 Input impedance: $10k\Omega$ OUTPUT Output impedance: 50Ω and 600Ω (separate sockets) Output 0dB: 30V pk-pk max. from $50\Omega(15V$ into 50 Ohms), 30V pk-pk max. from 600Ω (15V into 600 Ohms) 3V pk-pk max. from 50Ω (1.5V into 50 Ohms), 3V pk-pk max. from 600Ω (1.5V into 600 Ohms) Output -20dB: DC offset: <5mV GENERAL Power: 230V or 115V AC nominal 50/60Hz, adjustable internally; operating range ±14% of nominal; 20VA max.; Installation category II 210(W) x 75(H) x 230(D)mm, inc. feet. Size: Weight: 1.1kg **Operating Range:** + 5°C to 40°C, 20-80% RH. Storage Range: - 40°C to 70°C Safety: Complies with EN61010-1. EMC: Complies with EN63126.