TEKTRONIX

# P6021

The Tektronix P6021 is a classic split-core AC current probe designed for versatile, wide-band current measurements without breaking the circuit. Working in conjunction with a switchable passive termination, it supports high-accuracy AC current measurements directly on oscilloscopes with 1 Ṃ inputs.

## SPECIFICATIONS

### General

| | |
|---|---|
| Interfaces | BNC (via passive termination) |

### Physical

| | |
|---|---|
| Power Supply | Passive (no external power required) |
| Operating Temperature | 0 °C to +50 °C °C |
| Weight | 0.142 kg (with 5 ft cable) / 0.170 kg (with 9 ft cable) kg |
| Probe Head Dimensions (W×H×D) | 17.3 mm × 28.4 mm × 50.8 mm |

### Electrical Performance

| | |
|---|---|
| Bandwidth | 120 Hz to 60 MHz |
| Rise Time | 5.8 ns |
| Maximum Peak Current | 15 A |
| Coupling | AC only |
| Deflection Factors | 2 mA/mV, 10 mA/mV (switchable via passive termination) |
| Ampere-Second Product (at 10 mA/mV) | 500 A-µs |
| Ampere-Second Product (at 2 mA/mV) | 100 A-µs |
| Insertion Impedance at 1 MHz | 0.02 Ω |
| Insertion Impedance at 10 MHz | 0.12 Ω |
| Insertion Impedance at 50 MHz | 0.6 Ω |

### Mechanical & Physical Specifications

| | |
|---|---|
| Core Type | Split Core |
| Probe Head Shielding | Shielded probe head |
| Maximum Conductor Diameter | 3.8 mm (0.15 in) |
| Cable Length | 1.5 m (5 ft) |
| Output Connector Type | BNC |

### Compatibility

| | |
|---|---|
| Compatible Input Impedance | 1 MΩ |

### Safety & Compliance

| | |
|---|---|
| Slide-Open Grounding Protection | Shielded probe head is not grounded when slide is open |

### Electrical Characteristics

| | |
|---|---|
| Maximum Continuous Current | 10 A RMS |
| Maximum Working Voltage on Bare Conductor | 600 V RMS |
| Probe Cable Impedance | 50 Ω |

### Performance (without Termination)

| | |
|---|---|
| Low-Frequency 3 dB Point (without Termination, 50 Ω load) | 8.5 kHz |
| High-Frequency 3 dB Point (without Termination, 50 Ω load) | 120 MHz |
| Deflection Factor (without Termination, 50 Ω load) | 2 mA/mV |

### Performance (with Termination)

| | |
|---|---|
| Low-Frequency 3 dB Point (with Termination) | 120 Hz |
| High-Frequency 3 dB Point (with Termination) | 60 MHz |

### Safety & Environmental

| | |
|---|---|
| Operating Altitude | Up to 4,572 m (15,000 ft) |
| Storage Temperature | -40 °C to +75 °C |
| Storage Altitude | Up to 15,240 m (50,000 ft) |

### Performance

| | |
|---|---|
| Maximum DC Current | 0.5 A (for <10% desensitization) |
| Insertion Impedance at 100 kHz | 0.005 Ω |

### Accessories

| | |
|---|---|
| Standard Passive Termination | 011-0105-00 |

## TECHNOLOGY

Split-core AC current transformer

## APPLICATIONS

AC current measurements on oscilloscopes

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.