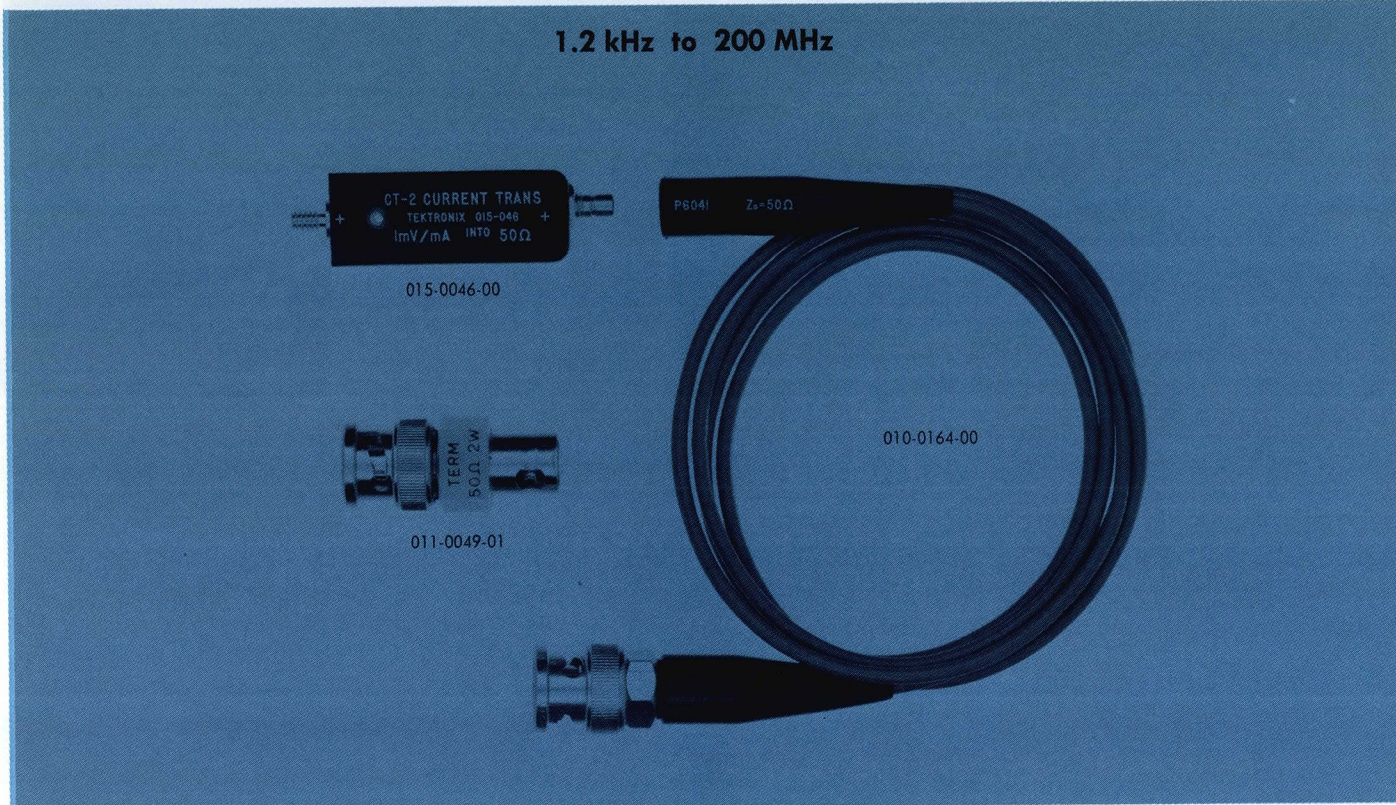


P6041/CT-2 AC Current Probe

1.2 kHz to 200 MHz



The P6041/CT-2 Current Probe is designed for use with Tektronix DC-to-150 MHz oscilloscopes. A 50-Ω termination is used in conjunction with the P6041/CT-2 for terminating the probe at the input of the oscilloscope.

The insulated case of the CT-2 Current Transformer is convenient to use in applications where limited circuit space exists. Several CT-2 Transformers may be placed throughout the circuit and monitored by one or more P6041 Probes. Conductor sizes up to 0.050 inches in diameter can be monitored.

P6041 PROBE

The P6041 Probe serves as an interconnecting cable between the CT-2 Transformer and the oscilloscope input. A 50-ohm termination is used in conjunction with the P6041 for terminating the probe at the high impedance input of the oscilloscope used.

Although designed for use with the CT-2, the P6041 Probe can be used with other test-point connectors, such as Amphenol Series 27 Sub-Minax or Sealectro Sub-Miniature RF.

IMPEDANCE is 50 ohms.

ATTENUATION is 1X.

OUTPUT CONNECTOR is BNC type.

CABLE LENGTH is 42 inches. Additional 50-ohm cable can be used in series with the probe. RG8/U or RG58A/U cable is recommended to preserve the high-frequency response.

CT-2 CURRENT TRANSFORMER

SENSITIVITY is 1 mV/mA into a 50-ohm load. Accuracy is better than $\pm 3\%$.

DECAY TIME CONSTANT is 125 μ s, approximated by 1% per 1.25 μ s; limit, 25 μ s.

RISETIME is approximately 0.5 ns.

FREQUENCY RESPONSE is 30% down at 1.2 kHz, 7% down at 200 MHz.

INSERTION IMPEDANCE with a 50-ohm termination is 0.04 ohms shunted by approximately 5 μ H; 0.08 ohms shunted by approximately 5 μ H without a 50-ohm termination.

CAPACITIVE LOADING to a bare wire passing through the CT-2 Transformer is typically 2.1 pF for #16 gauge, 0.7 pF for #22 gauge.

MAXIMUM VOLTAGE OF CIRCUIT UNDER TEST is 1000 V DC.

DIRECT CURRENT reduces the L/R time constant by a factor of 2 at 0.5 A.

PULSE CURRENT RATING is 100 A peak, with an amp-second product of 50 A- μ s. When the A-s product is exceeded, the core saturates reducing the CT-2 output to zero.

RMS CURRENT RATING is 2.5 A maximum.

TEMPERATURE RATING is -25° C to $+65^{\circ}$ C.

PHYSICAL DIMENSIONS are $\frac{3}{8} \times \frac{9}{16} \times 1\frac{13}{16}$ inches plus #6-32 $\times \frac{1}{4}$ -inch mounting stud. Net weight is approx 8 ounces.

P6041/CT-2 CURRENT PROBE, order 015-0047-00. **\$47.50**
Includes: 50-Ω termination (011-0049-01); instruction manual (070-0406-01).

CT-2 CURRENT TRANSFORMER, order 015-0046-00 .. **\$21**

P6041 PROBE, order 010-0164-00 **\$16.50**

50-OHM TERMINATION, order 011-0049-01 **\$10**

U.S. Sales Prices FOB Beaverton, Oregon
Please refer to General Information page