

# Specifications

The following specifications apply when the instrument warms up for a period of at least 20 minutes in an environment that does not exceed the limits described in Table 2 below.

**Table 1: Electrical characteristics**

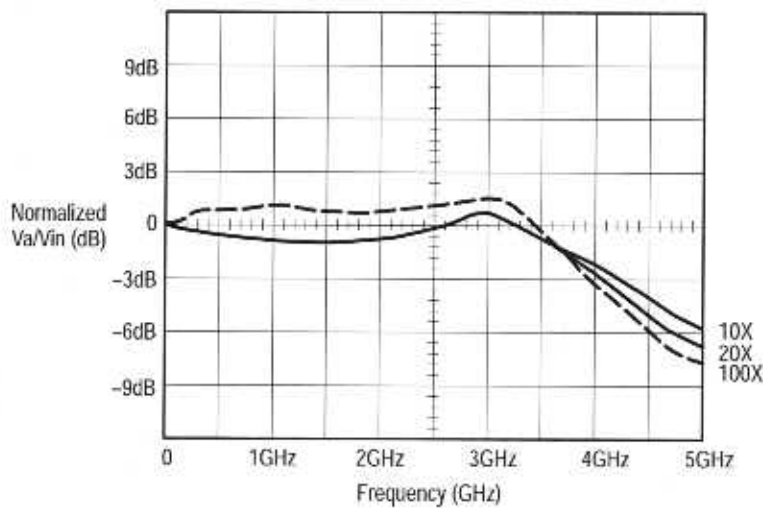
| Characteristic                                  | 1X                  | 10X                 | 20X                 | 100X                |
|---|---------------------|---------------------|---------------------|---------------------|
| Attenuation Tolerance <sup>1,2</sup>            | ±5%                 | ±3%                 | ±3%                 | ±3%                 |
| Input Resistance <sup>1,2</sup>                 | 50 Ω ±5%            | 500 Ω ±3%           | 1000 Ω ±3%          | 5000 Ω ±3%          |
| Input Capacitance                               | N/A                 | ≤1 pF               | ≤1 pF               | ≤2.1 pF             |
| Maximum Continuous Nondestructive Input Voltage | 15 V <sub>RMS</sub> | 15 V <sub>RMS</sub> | 22 V <sub>RMS</sub> | 50 V <sub>RMS</sub> |
| Probe Bandwidth <sup>3</sup>                    | ≥1.5 GHz            | ≥3.5 GHz            | ≥3.5 GHz            | ≥1.5 GHz            |
| Rise Time <sup>4</sup>                          | ≤300 ps             | ≤100 ps             | ≤100 ps             | ≤233 ps             |
| Signal Delay                                    | 7.75 ±0.05 ns       | 7.75 ±0.05 ns       | 7.75 ±0.05 ns       | 7.75 ±0.05 ns       |

<sup>1</sup> System characteristic.

<sup>2</sup> Oscilloscope input 50 Ω ±1%.

<sup>3</sup> See Figure 2.

<sup>4</sup> Probe only.



**Figure 2: P6156 frequency vs impedance**

**Table 2: Environmental characteristics**

| Characteristic        | Description   |
|-----------------------|---|
| Temperature Range     |   |
| Operating             | -15° C to +55° C (+5° F to +131° F)                                 |
| Nonoperating          | -62° C to +85° C (-80° F to +185° F)                                |
| Humidity <sup>1</sup> | Five cycles (120 hr) at 95% to 97% relative humidity 30° C to 60° C |

<sup>1</sup> Reference to MIL-E-1600F, paragraph 4.5.9 through 4.5.9.5.1, class 3.

**Table 3: Physical characteristics**

| Characteristic  | Description      |
|-----------------|------------------|
| Length          | 1.5 m (4.9 ft.)  |
| Shipping Weight | .907 kg (2 lbs.) |

**Table 4: Certifications and compliances**

|                           |                               |
|---------------------------|-------------------------------|
| Underwriters Laboratories | The P6156 probe is UL listed. |
|---------------------------|-------------------------------|