Specifications

The characteristics listed in Table 1 apply to P6136 probes installed on Tektronix 2400 Series oscilloscopes unless otherwise noted.

Specifications apply when the probe and host instrument warm up for a period of at least 10 minutes in an environment that does not exceed the limits described in Table 2 on page 7.

Table 1: Electrical characteristics[1]

Characteristic	Description
Attenuation[2]	10X: ±1% at DC
Input resistance[2,3]	10 MΩ ±1% at DC
Input capacitance[3]	10.8 pF at DC
Compensation range	12 pF to 18 pF
Signal delay	Delay difference between any two probes is less than 200 ps.
Maximum system bandwidth (–3 dB)	350 MHz
Maximum Input Voltage[4,5]	300 V RMS CAT I or 300 V DC CAT I 150 V RMS CAT II or 150 V DC CAT II 100 V RMS CAT III or 100 V DC CAT III 425 V peak, @50% DF, <1 sec PW 750 V peak, @10% DF, <50 µs PW See Figure 8 for voltage derating curve.

1 **Installed on Tektronix 2400 Series oscilloscope, bandwidth 150 MHz or greater.**

2 **System characteristic.**

3 **Also see Figure 7.**

4 **As defined in EN61010-1. See Certifications and compliances in Table 4**

5 **RMS=Root Mean Square=rms=The square root of the average of the sum of the squares of the instantaneous voltage in one cycle =** $\sqrt{\sum (fx_i)^2 / n}$ **.**
300 VDC=300V RMS, 420 V Peak (sinewave)=300 V RMS See Figure 6.

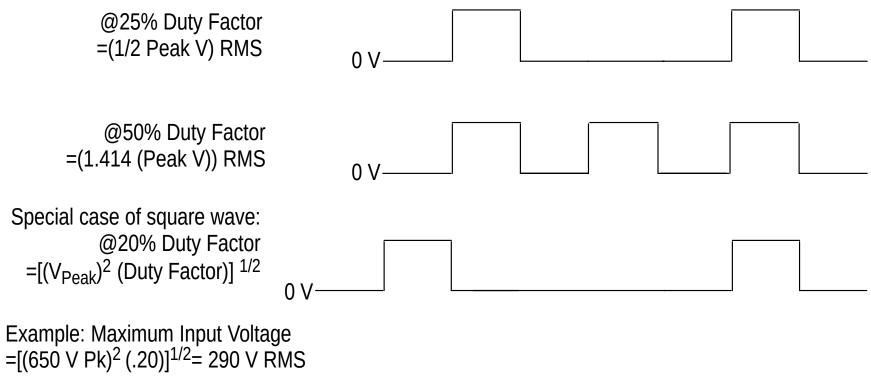

Figure 6: Maximum input voltage calculation example

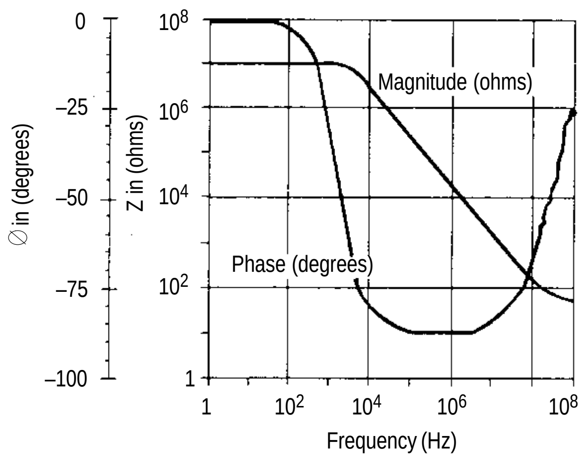

Figure 7: Typical P6136 input impedance

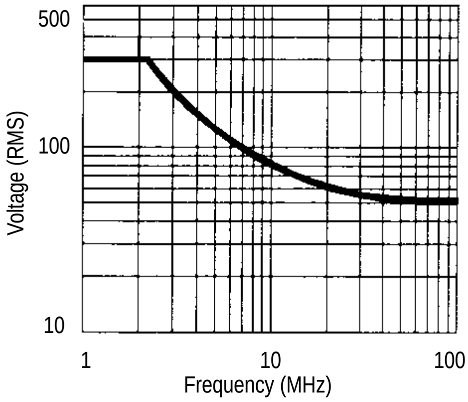

Figure 8: Typical P6136 voltage derating

Table 2: Environmental characteristics

Characteristic	Description
Temperature range	
Operating	–15° C to 65° C (+5° F to 149° F)
Nonoperating	–62° C to 85° C (–80° F to 185° F)
Humidity	Five cycles (120 hr) at 95% to 97% relative humidity, per Tektronix standard 062–2847–00, Class 3 (MIL-T-28800). Refer to MIL-E-16400F, paragraph 4.5.9 through 4.5.9.5.1, class 4.
Altitude	< 2000 meters

Table 3: Physical characteristics

Characteristic	Description
Net weight[1]	150.4 g (5.3 oz)
Probe cable length	1.3 m (4.3 ft)

1 **Includes accessories.**

Table 4: Certifications and compliances

EC Declaration of Conformity	Compliance was demonstrated to the following specification as listed in the Official Journal of the European Communities: Low Voltage Directive 73/23/EEC as amended by 93/68/EEC:	
	EN 61010-1/A2	Safety requirements for electrical equipment for measurement, control, and laboratory use
	EN 61010-2-031:1994	Particular requirements for hand-held probe assemblies for electrical measurement and test
Overvoltage Category	Category:	Examples of Products in this Category:
	CAT III	Distribution-level mains, fixed installation
	CAT II	Local-level mains, appliances, portable equipment
	CAT I	Signal levels in special equipment or parts of equipment, telecommunications, electronics
Pollution Degree 2	Do not operate in environments where conductive pollutants may be present.	
Safety	UL3111-1, First Edition & IEC61010-2-031, First Edition CSA C22.2 No. 1010.1-92 & CAN/CSA C22.2 No. 1010.2.031-94 EN61010-1/A2 EN61010-2-031 Pollution Degree 2	