Specifications

These specifications apply to a P6245 when used with a TDS 684A oscilloscope.

The probe and instrument must first be allowed to warm up for 20 minutes before measurements are taken.

CAUTION. *Do not apply voltages beyond the non-destructive input voltage range to the probe. Damage to the probe or circuit under test may result.*

Table 3-1: Warranted Electrical Specifications

Analog Bandwidth (system)	1 GHz
DC Attenuation Accuracy (probe only)	10:1 ±2%
Output Zero	±5 mV or less at output of probe ±50 mV or less displayed on screen with TEKPROBE interface
Rise Time (probe only)	267 ps on ≥10 GHz oscilloscope

Table 3-2: Typical Electrical Characteristics

Analog Bandwidth (probe only)	1.5 GHz on ≥10 GHz oscilloscope (See Figure 3-1.)
Linear Input Dynamic Range	- 8 V to + 8 V. (Equivalent to - 0.8 V to + 0.8 V at the output of the probe.)
Linearity	± 4% or less of dynamic range
Non-Destructive Input Voltage Range	- 15 V to + 15 V (DC + peak AC) (See Figure 3-2.)
Input Resistance	1 MΩ at DC. (See Figure 3-4)
Input Capacitance	≤1.0 pF
Offset Range	-10 V to +10 V
DC Offset Drift	100 μV/°C or less at output of probe 1 mV/°C or less displayed on screen with TEKPROBE interface
Delay Time	5.3 ns ±0.2 ns

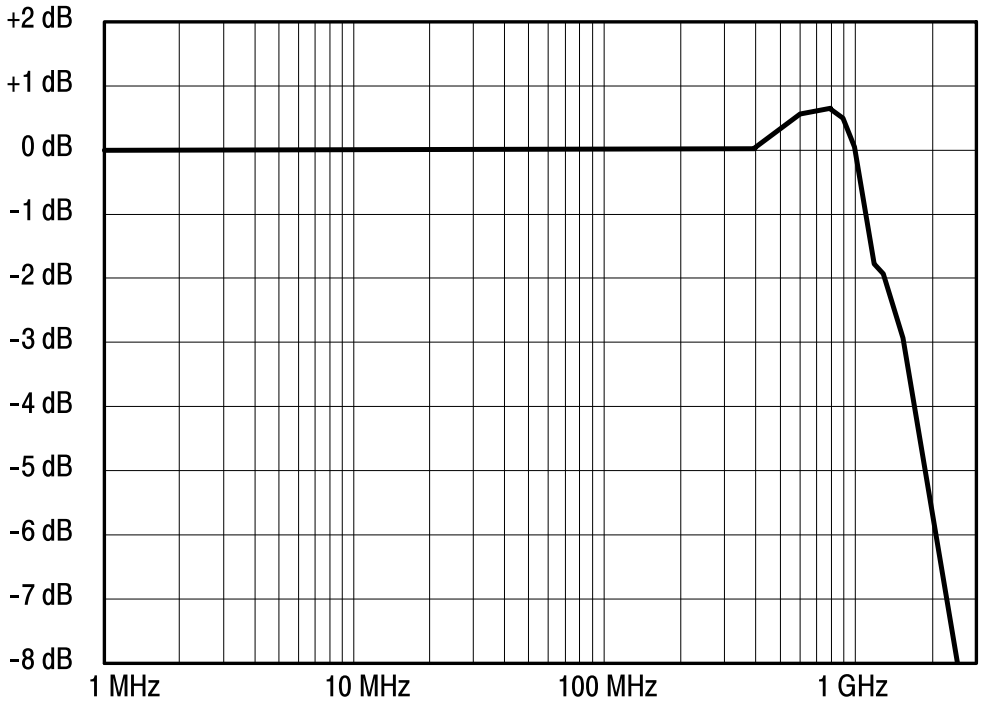

Figure 3-1: Typical Bandwidth

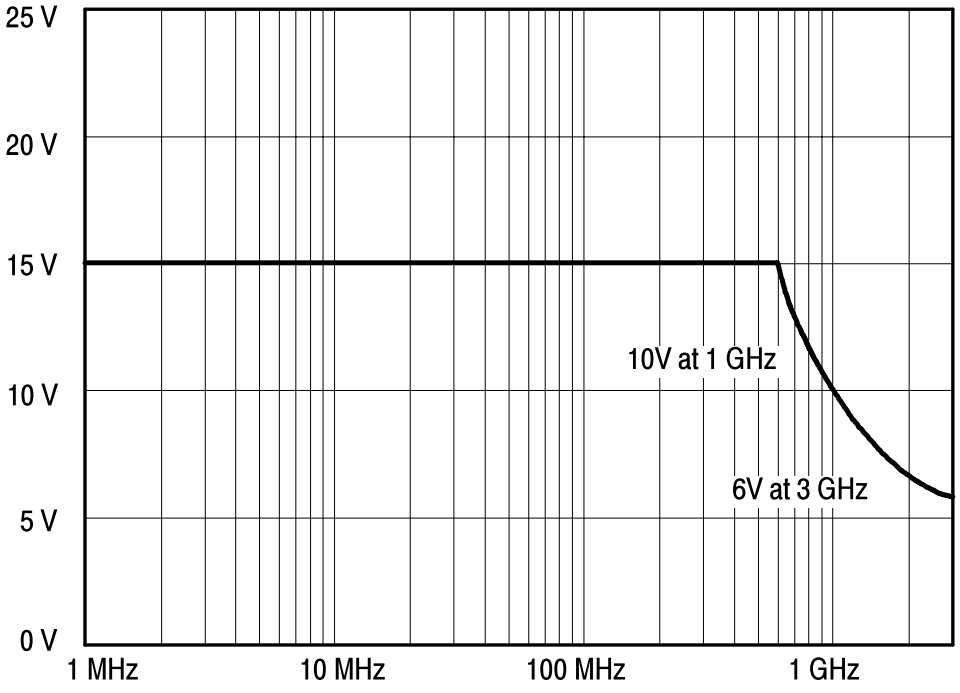

Figure 3-2: Typical Non-Destructive Peak Volt. Derating vs. Frequency

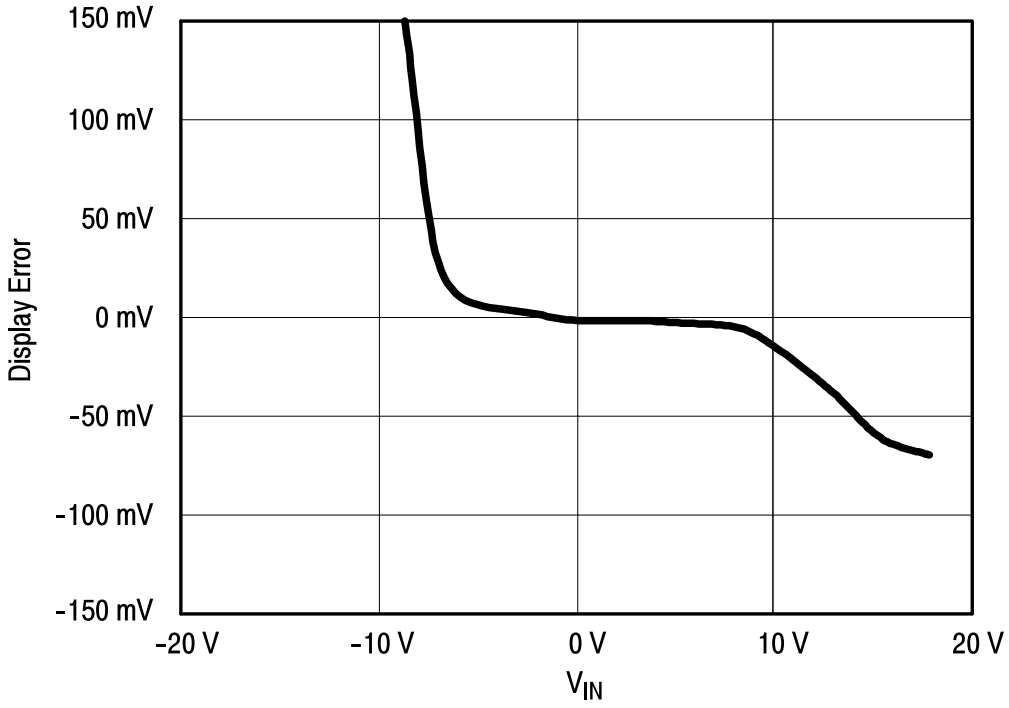

Figure 3-3: Typical Linearity Error vs V_{IN}

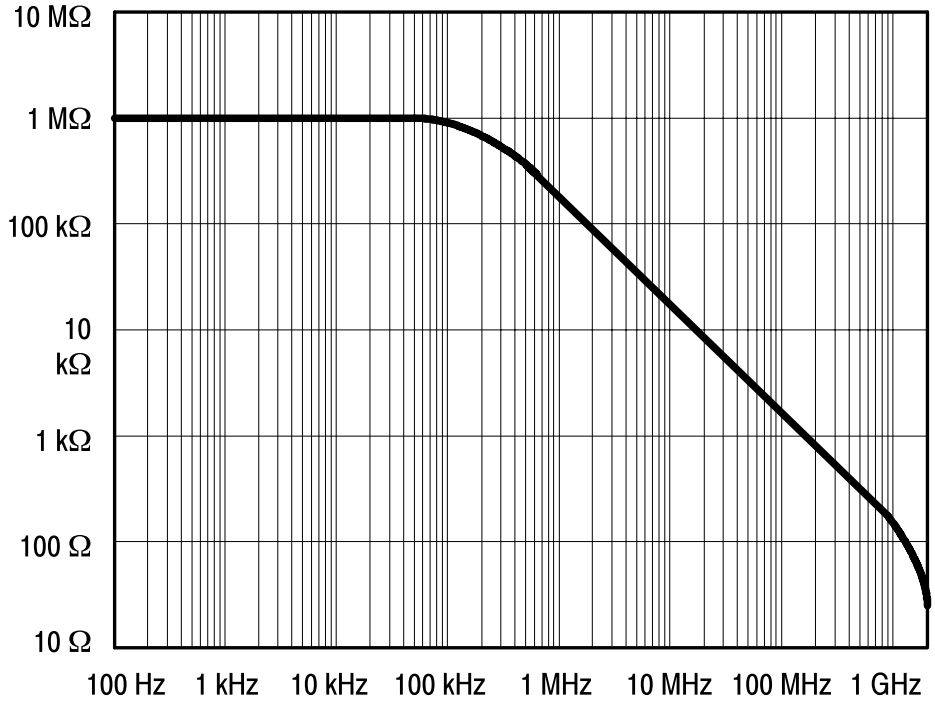

Figure 3-4: Typical Input Impedance vs. Frequency

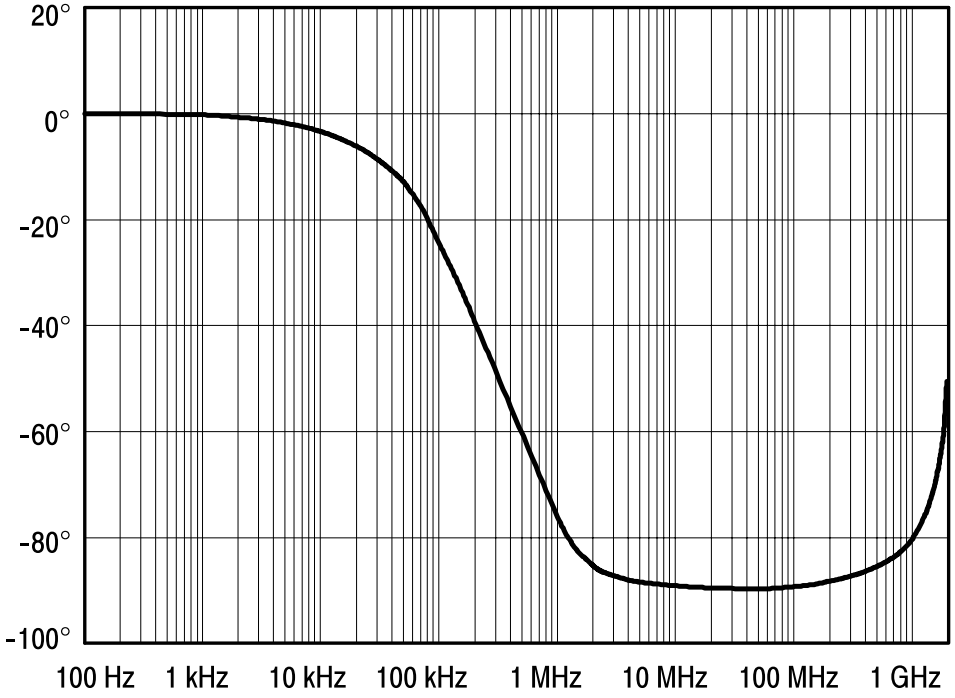

Figure 3-5: Typical Phase vs. Frequency

Table 3-3: Physical Characteristics

Net Weight	63.8 g (2.25 ounces)
Cable Length	1.3 meter

Table 3-4: Environmental Characteristics

Operating Temperature	0° C TO +50° C. The environmental exposure is the procedure stated in Tektronix Design Standard 062-2847-00 for Class 5 equipment.
Non-operating Temperature	- 40° C TO + 71° C. The environmental exposure is the procedure stated in Tektronix Design Standard 062-2847-00 for Class 5 equipment.
Humidity	The environmental exposure is the procedure stated in Tektronix Design Standard 062-2847-00 for Class 5 equipment.
Packaged Product Vibration and Shock	The packaged product qualifies under the Distribution Cycle 1 Assurance Level II for packaged products 0 - 20 lbs. Test 2 for Warehouse and Vehicle Stacking (Compression) is omitted. Tektronix standard 062-2858-00, Rev. B, Class 5.
Electrostatic Immunity	IEC 801-2
EMC	IEC 801-3
Altitude	Operating: 15,000 ft. Non-Operating: 50,000 ft.