Differential Amplifiers

Model **DXC100A**

Main Features

- DC to 100 MHz Bandwidth with DA1855A
  DC to 10 MHz Bandwidth with DA1822
- Max Input Voltage 500 V
- Selectable 10 or 100 Attenuation Factor
- 1.2 Meter Cable Length

The **DXC100A** is a high-performance, passive, matched, differential probe pair designed for use with the DA1800 series differential amplifiers. The probe pair consists of two highly matched individual probes that share a common compensation box to allow the attenuation factor on both probes to be simultaneously switched between 10x and 100x. When used with the DA1822 or DA1855A differential amplifier, the probe's attenuation factor is automatically incorporated into the effective gain display, and the location of the decimal into the voltage generator display. Although primarily designed for use with the amplifiers, the **DXC100A** differential probe pair can be used with any oscilloscope or plug-in unit with an input impedance of 1 M(omh)/15-26 pF and one inch (25.4 mm) spacing between connectors. When used on a differential amplifier, the **DXC100A** compensation box allows for precise adjustment and matching of the transient response and optimization of the system Common Mode Rejection Ratio (CMRR).

Specifications

General

Attenuation factor:	10 or 100
Bandwidth (-3 dB):	250 MHz
System Bandwidth:	**(-3 dB) (with DA1855)**: 100 MHz **(with DA1822)**: 10 MHz
System Risetime	**(with DA1855)**: 3.5 ns **(with DA1822)**: 35 ns
Input Resistance:	1 M(ohm) ±1%
Input Capacitance:	10.5 pF ±0.5 pF
Compensation	15 to 26 pF

Range:	
Maximum non-destructive Input Voltage:	500 V DC + peak AC
Length:	1.2 meter

Environmental Characteristics

Operating Range:	0° to 50°C
Non-Operating:	-4° to 75°*C

Physical Characteristics

Weight:	0.21 kg (0.47 lb)
Shipping Weight:	0.45 kg (1 lb)
Warranty:	1 year