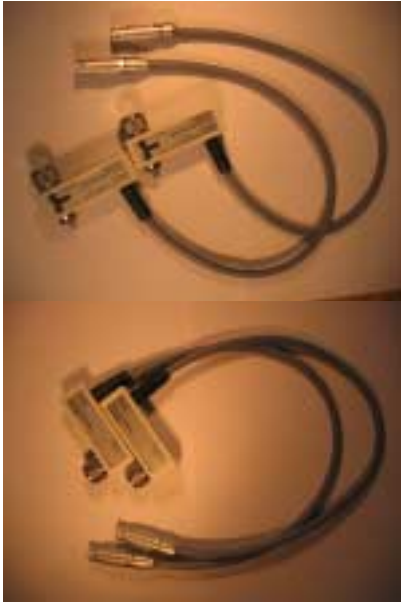


UDX-G11, UDX-G12, UDX-G13 and UDX-G14 Pulse Heads



measurements are as accurate as possible.



UDX-G11 Head: the top waveform shows distortions caused by cables and connectors with reflected rise time of 202.5 ps. The bottom waveform shows how normalization corrects for these distortions. Normalized rise time is 101.6 ps.

P/N 790032 –
UDX-G13 TDR/TDT Loop-through Head.

P/N 790033 –
UDX-G14 TDT Head

Features and Benefit

- TDR/TDT Loop-through Heads (400 mV pulse amplitude) and High-amplitude TDT Heads (2 V pulse amplitude)
- 100 ps Rise Time on both polarities
- Flat pulses
- Less than 3 ps typ. RMS Jitter
- SMA-type input/output connectors
- 50-cm extended cable to reduce the input cable losses

Applications

- High-resolution single-ended, common and differential TDR/TDT
- Ability use with UDS-2214 sampling oscilloscope
- Transmission Line Quality
- Impedance Measurements
- Crosstalk Measurements

Product Description

The UDX-G11/-12/-13/-14 are a single-ended pulse heads used for high-resolution TDR/TDT measurements in concern with the UDS-2214 sampling oscilloscope. They provide fast and flat pulses having both polarities, rise time of 100 ps and flat transient response.

The UDX-G11 and UDX-G13 are TDR/TDT Loop-through Heads having 400-mV pulse amplitude, while the UDX-G12 and UDX-G14 are TDT Heads having increased 2-V pulse amplitude.

Different configurations of the heads provide single-ended, common and differential TDR/TDT measurements.

Normalization as an error-correction process is available. It helps ensure that TDR and TDT

Specifications and Characteristics

Compatibility - Compatible with UDS-2214 sampling oscilloscope.
Heads —

UDX-G11 and UDX-G13: TDR/TDT Loop-through Heads,
UDX-G12 and UDX-G14: TDT Heads.

Pulse Polarity —

UDX-G11 and UDX-G12: Positive.

UDX-G13 and UDX-G14: Negative.

Pulse Amplitude —

UDX-G11 and UDX-G13: 400 mV typ. terminated on 50 Ohm on both outputs.

UDX-G12 and UDX-G14: 2 V typ. terminated on 50 Ohm.

Rise Time - 100 ps typ.

Aberrations after step —

± Overshoot: < 10%,
For the first 150 ps following step transition: < ± 6%,
150 ps to 2 ns following step transition: < ± 4%,
2 to 100 ns following step transition: < ± 2%.

Displayed RMS Jitter with UDS-2214 - 3.5 ps (maximum), 3.0 ps (typical).

Input Connectors —

UDX-G11 and UDX-G13: SMA (m), SMA (f).

UDX-G12 and UDX-G14: SMA (m).

Ordering Information

P/N 790030 –
UDX-G11 TDR/TDT Loop-through Head.

P/N 790031 –
UDX-G12 TDT Head.