

## UDX-G01 Pulse Head



150 ps to 2 ns following step transition:  $< \pm 4\%$ ,  
2 to 100 ns following step transition:  $< \pm 2\%$ .

**Source Resistance** -  $(50 \pm 1)$  Ohm.

**Output Connector** - N-type, 7x3,04 mm (m).

**Trigger Input Connector** - Optional BNC (m) or SMA (m)

### Features and Benefit

- Tunnel Diode Pulse Head
- 35 ps own Rise Time.
- 200 mV into 50 Ohm Amplitude
- 50-Ohm Source
- Low Aberrations
- 2 ps typical Displayed RMS Jitter

### Applications

- Transient response test
- TDR/TDT
- Impedance and Cross-talk Characterization of Circuit Boards, IC Packages and Cables
- Semiconductor Characterization

### Ordering Information

**P/N 790021** –

UDX-G01 Pulse Head.

**Option NB:** BNC (m) trigger input connector.

**Option NS:** SMA (m) trigger input connector.

### Product Description

The UDX-G01 Pulse Head is a fast tunnel-diode step generator designed for use with the UDS-2000 Series PC-Sampling Oscilloscopes for a short-distance high-resolution TDR/TDT. The UDX-G01 Pulse Head may be powered by the UDS-2000 Series oscilloscopes to get a fast, clean step signal source.



Typical 40-ps transient response of the UDX-G01 Pulse Head shown together with 10-GHz sine-wave

### Specifications and Characteristics

**Compatibility** - Compatible with all UDS-2000 Series sampling oscilloscopes excluding UDS-2214.

**Displayed Rise Time** – 40 ps or less with UDS-2030, UDS-2020, UDS-2022 and UDS-2128. 45 ps or less with UDS-2012, UDS-2021 and UDS-2123.

**Amplitude** - 200 mV typical.

**Polarity** – Positive.

**Pulse Width** - 1  $\mu$ s or more.

**Displayed RMS Jitter** - 2.5 ps (maximum), 2.0 ps (typical).

**Aberrations after step** - Overshoot:  $< 10\%$ ,  
For the first 150 ps following step transition:  $< \pm 6\%$ ,