

ES62X-PT2 HV Pulse Wideband Pick-off Tee



1. Description

The model ES62X-PT2 DC-10 GHz Wideband Pick-off Tee is an ultra-high bandwidth measurement probe for the voltage measurement of 50 Ohm transmission line. The probe is a resistive Pick Tee design and must be terminated with 50 Ohm signal path to achieve the rated specifications. The probe factor is determined by the voltage divider between the 50 Ohm termination and the internal probing circuit, or $PF = (R_{PT} + 50)/50$.

NOTE: Care must be taken to ensure overvoltage is not applied to the measurement instrument. The output voltage of the Pick Tee can be determined by $V_m = V_{in}/PF$.

2. Features

- Ultra-wide bandwidth low insertion loss, < 1 dB up to 13.5 GHz
- Ultra-wide bandwidth transfer response, \pm up to 6 GHz, \pm 3 dB up to 10 GHz
- SMA connectors, well-shielded enclosure

3. Applications

- General direct high frequency voltage measurement for transmission line signal
- Overlapping TDR voltage measurement for ultra-high current and long pulse TLP tests
- Non-overlapping TDR voltage measurement for ultra-high frequency vf-TLP tests

4. Specifications

Specifications	Parameter	Unit	Comments
Probe Factor in Ratio	43.1:1		
Probe Factor in dB	-32.7	dB	
Typical DC Measurement Range	30	V	
Typical Pulse Measurement Range	3	kV	Tested with 100 ns TLP pulse, not intended for high current (>100A) TLP application)
Dimensions	39x42x15	mm	
Weight	28	g	

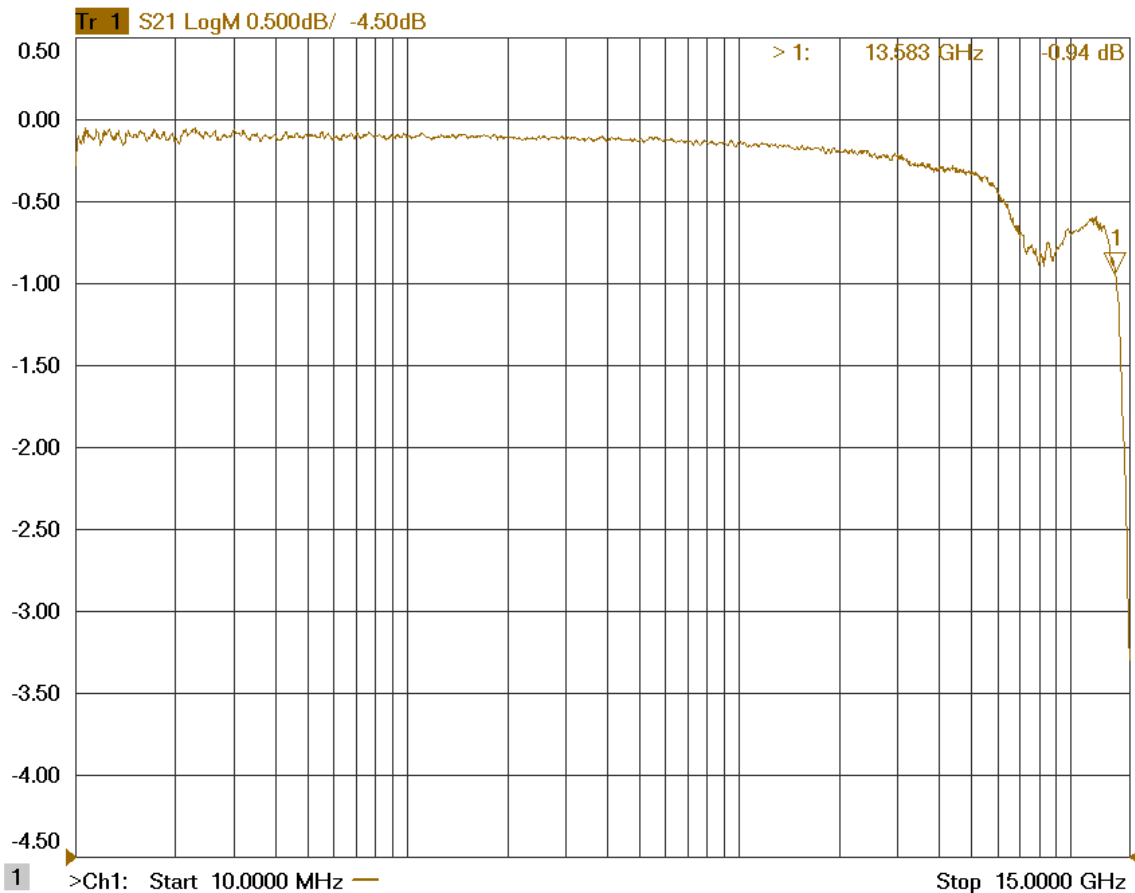


Figure 1 ES62X-PT2 Typical Insertion Loss of the Through Ports (Measurement port is terminated with 18GHz SMA load)

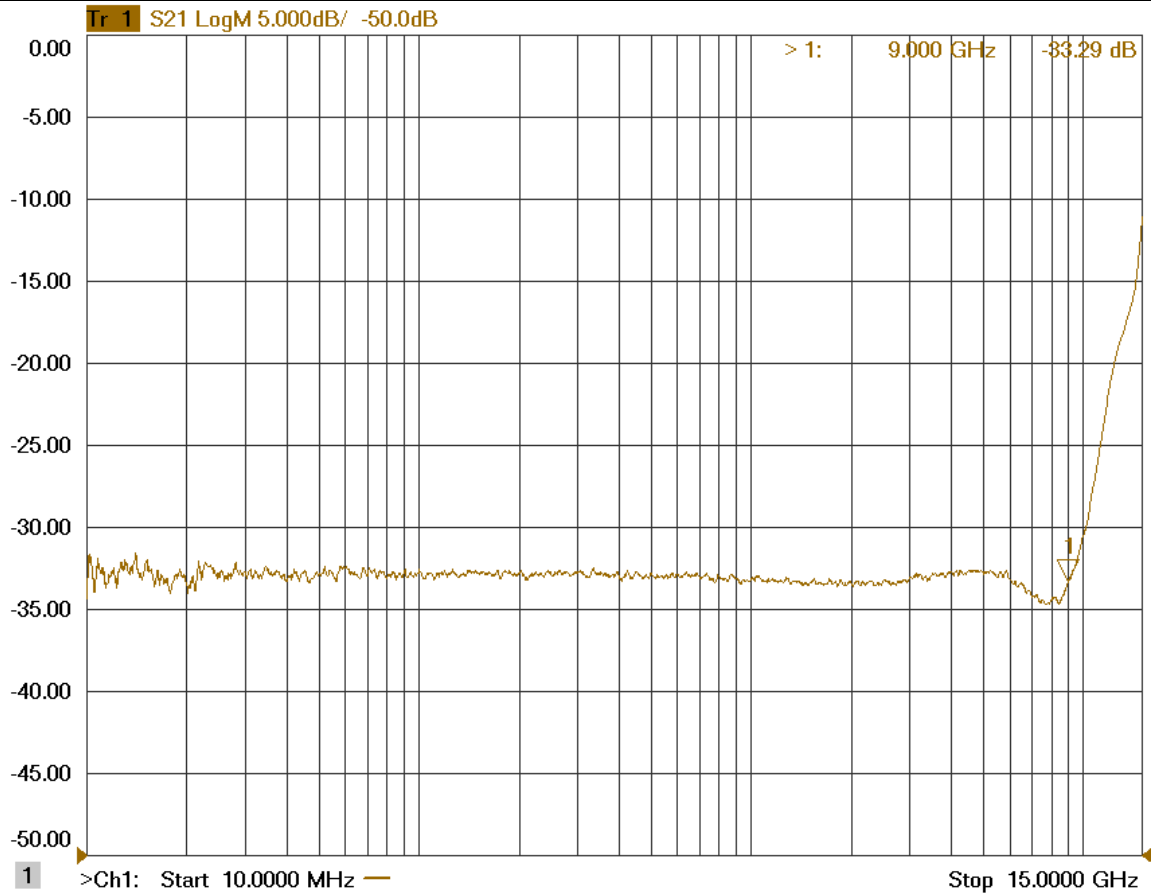


Figure 2 ES62X-PT2 Voltage Measurement Frequency Response (Through port is terminated with 18GHz SMA load)

5. Ordering Information

Part Number	Description	Lead Time
ES62X-PT2	ES62X-PT2 DC-10 GHz Wideband Voltage Pick-off Tee	1-3 weeks