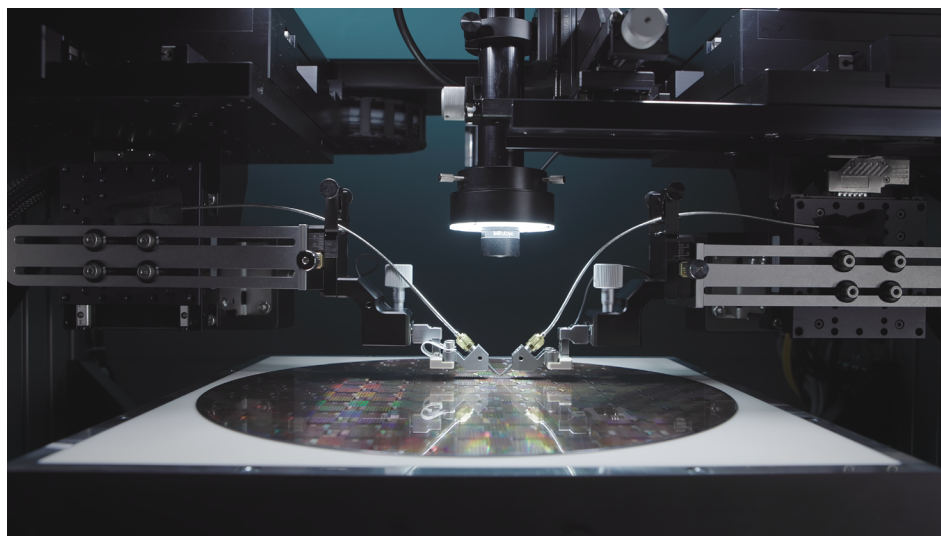
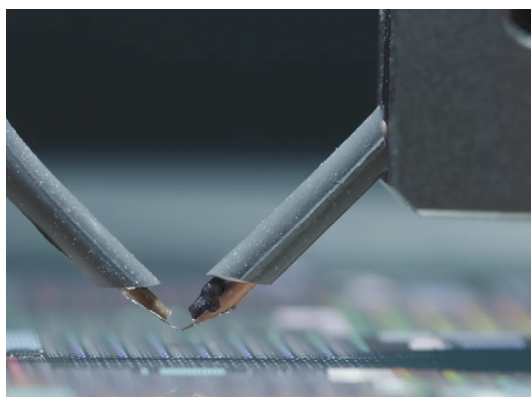


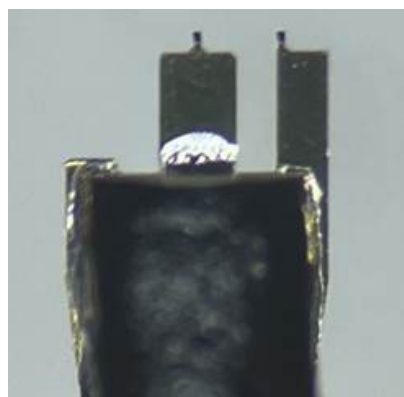
# TITAN™ Probes for Pulsed High-Voltage and ESD Characterization



MPI Corporation and HPPI have joined forces to set a new benchmark in wafer-level testing with a new family of TITAN™ Probes, specifically tailored for pulsed high-voltage and ESD characterization. Leveraging HPPI's leading expertise in general wafer-level testing and advanced pulse generator technology together with MPI's industry-leading RF probe know-how, this collaboration enables reliable, repeatable, and accurate testing across the full range of ESD protocols. The new TITAN™ Probe family is engineered to overcome the practical challenges of modern wafer-level testing, ensuring precise contact performance, consistent results and seamless compatibility with ESD protocols such as TLP, VF-TLP or HMM.



Left Probe - Standard 50 Ohm TITAN™ Probe.  
Right Probe - Special ESD/TLP probe for HPPI test system with series resistor embedded in the signal path.



Close-up view of KG(SG) tips for high-voltage applications.

## BENEFITS

- Ultra-fast pulse with down to 20 ps minimum rise time
- Up to 1.5 kV pulse voltage
- Precise and consistent tip pitch
- Unique probe tip visibility and longest lifetime
- Minimal pad damage
- Full impedance control
- Lowest and consistent contact resistance
- Wideband DC to 26 GHz measurements
- Durable special designed probe tips optimized for high voltage

## CHARACTERISTICS

### Typical Electrical Characteristics

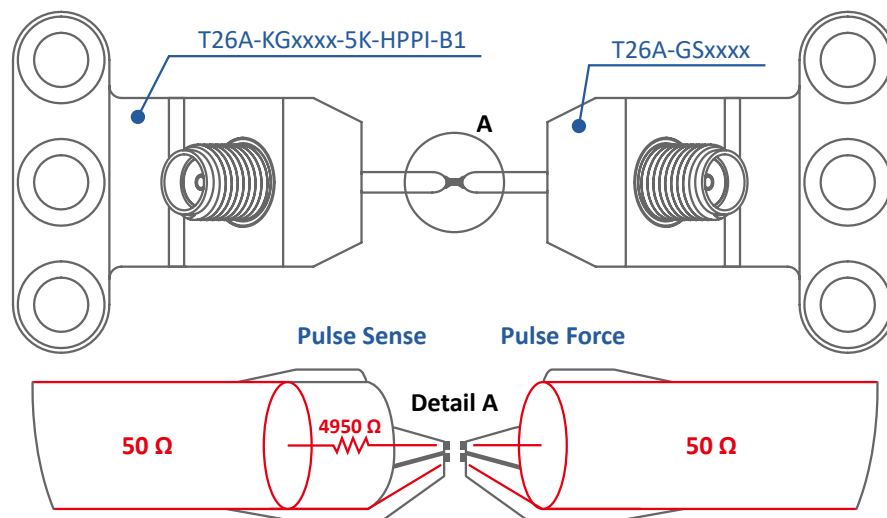
Characteristic Impedance	0.5 kOhm, 1 kOhm, 2.5 kOhm, & 5 kOhm
Frequency range	DC to 26 GHz
Ground & signal alignment error	< +/- 3 µm
Maximal voltage	< 1.5 kV
Contact resistance on Au	< 6 mΩ
Contact resistance on Al	< 45 mΩ
Temperature range	-40 °C...+175 °C



### Mechanical Characteristics

Tip design	MEMS CPW, optimized for high-voltage and minimal rise time pulses
Connector	SMA, female
Tip material	Ni Alloy
Tip width	40 µm
Pitch range	100 µm to 225 µm in 25 µm steps 250 µm to 1250 µm in 50 µm steps Consult factory on availability.
Tip configuration	GK(GS) or KG(SG)
Connectors style	A-style, 45-degree

Below is a typical high power device measurement scenario utilizing a standard 50 Ohm TITAN™ RF probe (on the right) and a specially developed high impedance high voltage TLP probe (on the left) with a series resistor built into the probe tip path.

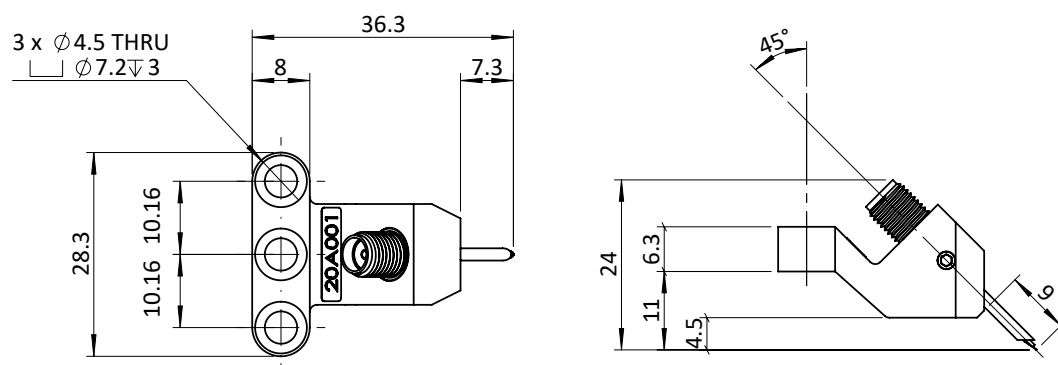


**Note:**

xxxx ... Pitch in µm

„0100“ means probes with 100 µm pitch

## MECHANICAL CHARACTERISTICS



## ORDERING INFORMATION

### T26A-BBXXXX-RR-HPPI-YY

Configuration (BB)	Pitch (XXXX)	Termination (RR)	Version (YY)
GK(GS), KG(SG)	100 µm to 225 µm in 25 µm steps;	(Choose one resistor value.)	(A1 or B1 dictated by pitch.)
K = series resistor	250 µm to 1250 µm in 50 µm steps	0.500 kOhm = 0.500K 1 kOhm = 1K 2.5 kOhm = 2.5K 5 kOhm = 5K	A1 = 250 µm to 1250 µm pitch range rated for 1500 Volts.  B1 = 100 µm to 225 µm pitch range rated for approximately 1000 to 1200 Volts (voltage limit due to pitch)
	Consult factory on availability.		

Example: **T26A-GK0250-5K-HPPI-A1**

T26A-GK0250-5K-HPPI-A1. The TITAN™ Probe for the ESD test with the 5 kOhm series resistor embedded into K terminal and rated up to 1500V when used with HPPI system.

See MPI Corporation's Terms and Conditions of Sale for more details.

Direct contact:  
 Asia region: [ast-asia@mpi-corporation.com](mailto:ast-asia@mpi-corporation.com)  
 EMEA region: [ast-europe@mpi-corporation.com](mailto:ast-europe@mpi-corporation.com)  
 America region: [ast-americas@mpi-corporation.com](mailto:ast-americas@mpi-corporation.com)

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### MPI Global Presence

