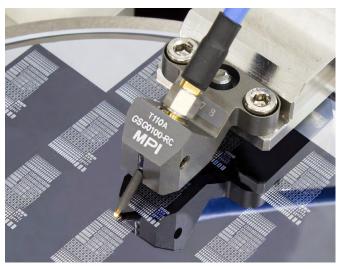
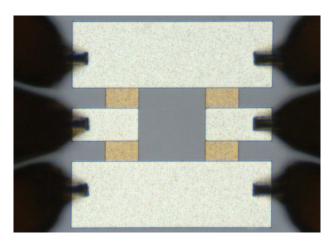
## **TITAN**<sup>TM</sup>**-RC Probe** | 20 µm wide Reduced Contact Size Option for RF Probes

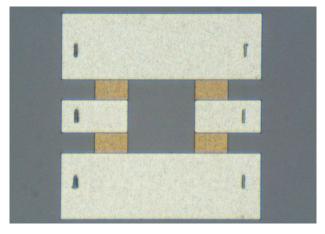
Did you know that TITAN™ RF probes can be ordered with two options for tip widths? Most MPI Titan RF probes that operate at 110 GHz or less come standard with 30 µm wide contacts for the ground and signal tips. Occasionally, customers request smaller contacts for use with smaller pad structures. MPI responded with a Reduced Contact Option (RC) that allows customers to select 20 µm wide ground tips and signal tips for their small pitch probes. The tip width was reduced by 33% to 20 µm, but tip visibility and long tip life TITAN™ probe customers have come to appreciate, remains. The TITAN™-RC probe significantly reduces cost of test for next gene-



ration commercial RF and mm-wave silicon devices and ICs. It enables accurate, and reproducible measurement results obtained for Si devices with Al pad metallization as small as 30x30 μm.

Depending on the probe type/bandwidth you choose, TITAN RC probes with 20  $\mu$ m wide contacts are available in GSG, SG, GS, GSGSG, GSSG, and SGS tip configurations with pitches from 50  $\mu$ m to 300  $\mu$ m in 25  $\mu$ m increments. Pitches larger than 300  $\mu$ m are available too upon special request.





TITAN™-RC Probes in contact (left) and the probes' footprints on the Al pads of the device (right), respectively.

## **Mechanical Characteristics**

Cantilever needle material	Ni alloy
Contact pressure @2 mils overtravel	20 g
Lifetime, touchdowns	> 1,000,000
Ground and signal alignment error <sup>[1]</sup>	± 3 μm <sup>[1]</sup>
Planarity error <sup>[1]</sup>	± 3 µm <sup>[1]</sup>
Contact footprint width	< 20 μm
Contact resistance on Au	< 3 mΩ
Recommended minimum pad size	30x30 μm

[1] Parameter may vary depending upon tip configuration and pitch.