

MEASUREMENTS OF SURFACE RESISTANCE OF SUPERCONDUCTING MATERIALS

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Superconducting filters exhibit low IL and NF due to low surface resistance. A Sapphire rod resonator is used for accurate measurements of R_s of YBCO on LAO and MgO at 10, 17 and 25 GHz from 13 K to room temperature at power levels from -50 dBm to $+30$ dBm.