

Title (en)

INTEGRATED SICR METAL THIN FILM RESISTORS FOR SIGE RF-BICMOS TECHNOLOGY

Title (de)

INTEGRIERTE SICR-METALL-DÜNNSCHICHTWIDERSTÄNDE FÜR SIGE-RF-BICMOS-TECHNOLOGIE

Title (fr)

RESISTANCES A FILM MINCE METALLIQUE AU SICR INTEGRE POUR LA TECHNOLOGIE RF ET BICMOS AU SIGE

Publication

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Application

**EP 05784383 A 20050922**

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Abstract (en)

[origin: WO2006035377A2] The present invention provides integrated SiCr metal thin film resistors (10) for SiGe RF BiCMOS technology. The use of integrated SiCr thin film resistors (10) increases packaging density and reduces the parasitic effect induced from surface mount configurations at high frequencies. In accordance with the present invention, the sheet resistance (Rs) of SiCr thin film resistors can be varied in a wide range of about 400 - 2500 ohms/square with less than 2% uniformity by selectively controlling SiCr deposition conditions. In addition, SiCr thin film resistors formed in accordance with the present invention have linear and quadratic coefficients of TCR less than about 100 ppm/°C and -0.9 ppm/°C<SUP>2</SUP>, respectively.

IPC 8 full level

**H01L 21/02** (2006.01)

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