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

EP 1938361 A2 20080702 (EN)

Application

EP 05784383 A 20050922

Priority

- IB 2005053126 W 20050922
- US 61399804 P 20040928
- US 62868304 P 20041117

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 ppml°C and -0.9 ppm/°C², respectively.

IPC 8 full level

H01L 21/02 (2006.01)

CPC (source: EP KR)

H01L 27/04 (2013.01 - KR); **H01L 27/06** (2013.01 - KR); **H01L 28/24** (2013.01 - EP); H01L 23/5228 (2013.01 - EP); H01L 2924/0002 (2013.01 - EP)

Citation (search report)

See references of WO 2006035377A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006035377 A2 20060406; **WO 2006035377 A3 20060518**; EP 1938361 A2 20080702; JP 2008515215 A 20080508; KR 20070054225 A 20070528

DOCDB simple family (application)

IB 2005053126 W 20050922; EP 05784383 A 20050922; JP 2007534144 A 20050922; KR 20077007070 A 20070328