Title (en)

SCHOTTKY DIODE WITH IMPROVED SURGE CAPABILITY

Title (de)

SCHOTTKY-DIODE MIT VERBESSERTER SPITZENFÄHIGKEIT

Title (fr)

DIODE SCHOTTKY A CAPACITE DE SURTENSION AMELIOREE

Publication

EP 1902466 A4 20100908 (EN)

Application

EP 06774471 A 20060705

Priority

- US 2006026002 W 20060705
- US 69663405 P 20050705

Abstract (en)

[origin: WO2007005844A2] An SiC Schottky diode die or a Si Schottky diode die is mounted with its epitaxial anode surface connected to the best heat sink surface in the device package. This produces a substantial increase in the surge current capability of the device.

IPC 8 full level

H01L 23/36 (2006.01); **H01L 23/367** (2006.01); **H01L 23/495** (2006.01)

CPC (source: EP)

H01L 21/563 (2013.01); **H01L 23/367** (2013.01); **H01L 23/49562** (2013.01); **H01L 23/49568** (2013.01); **H01L 29/872** (2013.01); H01L 24/83 (2013.01); H01L 29/1608 (2013.01); H01L 2224/16 (2013.01); H01L 2224/26145 (2013.01); H01L 2224/2929 (2013.01); H01L 2224/293 (2013.01); H01L 2224/32245 (2013.01); H01L 2224/73153 (2013.01); H01L 2224/73203 (2013.01); H01L 2224/83801 (2013.01); H01L 2224/83851 (2013.01); H01L 2924/00011 (2013.01); H01L 2924/01077 (2013.01); H01L 2924/10253 (2013.01); H01L 2924/12032 (2013.01); H01L 2924/13091 (2013.01)

C-Set (source: EP)

1. H01L 2924/10253 + H01L 2924/00
2. H01L 2924/00011 + H01L 2224/29075
3. H01L 2224/83851 + H01L 2924/00014
4. H01L 2224/2929 + H01L 2924/00014
5. H01L 2224/293 + H01L 2924/00014
6. H01L 2924/12032 + H01L 2924/00

Citation (search report)

- [X] DE 10002362 A1 20010802 - INFINEON TECHNOLOGIES AG [DE]
- [I] US 2005077615 A1 20050414 - YU GANG [US], et al
- See references of WO 2007005844A2

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 2007005844 A2 20070111; **WO 2007005844 A3 20071004**; CN 101223638 A 20080716; EP 1902466 A2 20080326; EP 1902466 A4 20100908; JP 2008545279 A 20081211

DOCDB simple family (application)

US 2006026002 W 20060705; CN 200680022408 A 20060705; EP 06774471 A 20060705; JP 2008519694 A 20060705