

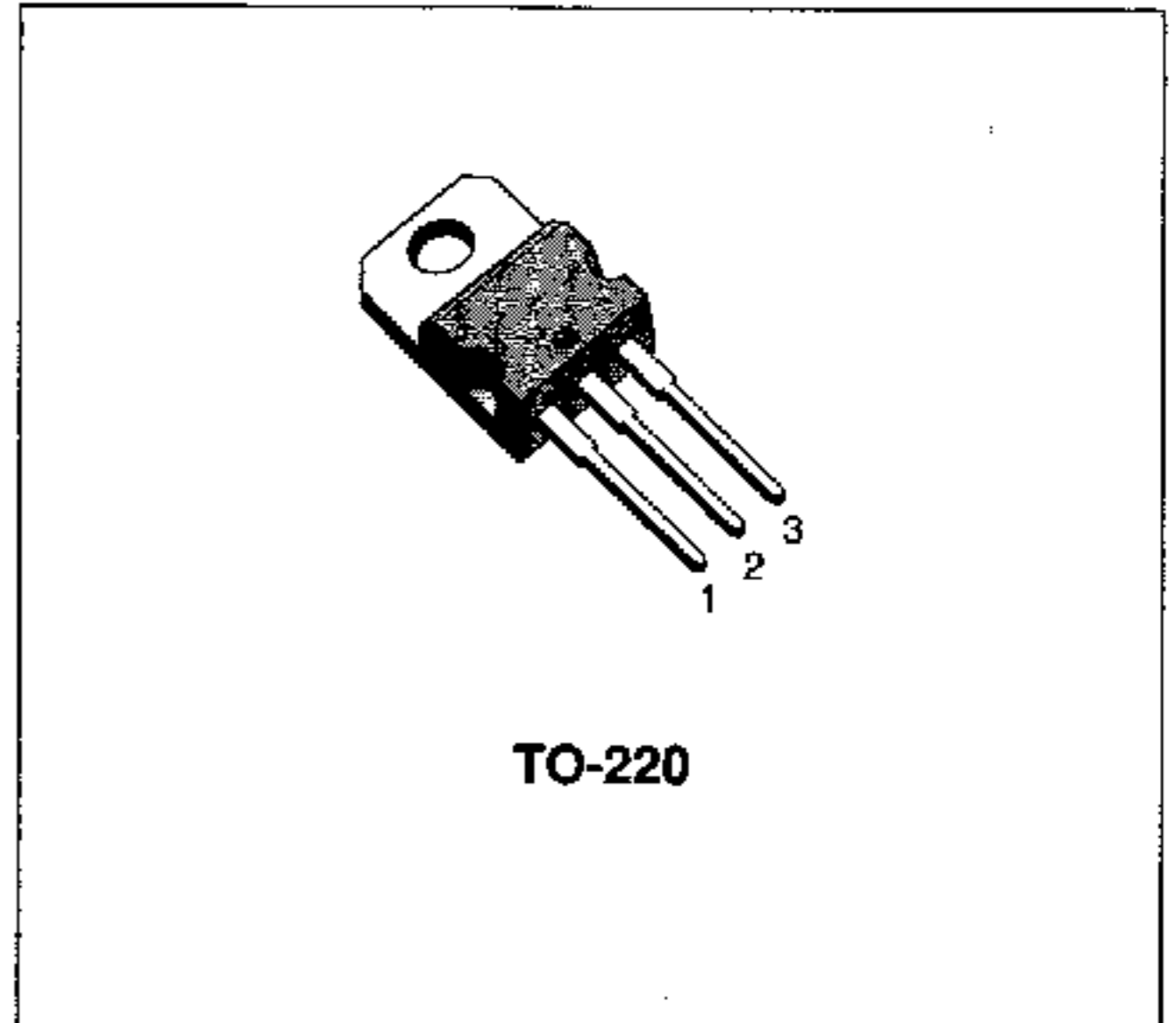
"OMNIFET":

## FULLY AUTOPROTECTED POWER MOSFET

TARGET DATA

TYPE	V <sub>clamp</sub>	R <sub>DS(on)</sub>	I <sub>lim</sub>
VNP14N04	42 V	0.07 Ω	14 A

- LINEAR CURRENT LIMITATION
- THERMAL SHUT DOWN
- SHORT CIRCUIT PROTECTION
- INTEGRATED CLAMP
- LOW CURRENT DRAWN FROM INPUT PIN
- DIAGNOSTIC FEEDBACK THROUGH INPUT PIN
- ESD PROTECTION
- DIRECT ACCESS TO THE GATE OF THE POWER MOSFET (ANALOG DRIVING)
- COMPATIBLE WITH STANDARD POWER MOSFET
- STANDARD TO-220 PACKAGE



### DESCRIPTION

The VNP14N04 is a monolithic device made using SGS-THOMSON Vertical Intelligent Power M0 Technology, intended for replacement of standard power MOSFETS in DC to 50 KHz applications. Built-in thermal shut-down, linear

current limitation and overvoltage clamp protect the chip in harsh environments.

Fault feedback can be detected by monitoring the voltage at the input pin.

### BLOCK DIAGRAM

