

Power Diodes

New Products

Philips Semiconductors is working intensively to bring new Power Diode products to the market. These are the products and technologies which appear for the first time in this data handbook:-

Medium Power Diodes

Philips extensive range of medium power diodes in axial and surface mount packages, were formerly listed in data handbook SC01 together with small signal diodes. Now combined with high power diodes in this data handbook. The range includes general purpose rectifiers; fast, ultrafast and hyperfast rectifiers; zener diodes; transient suppressors; damper diodes for deflection applications, high voltage diodes with voltage ratings up to 30kV, ripple blocking diodes; AM pin diodes and schottky barrier rectifiers.

High Current Diodes

Intended for high current, high frequency rectification in switched mode power supplies. Types BYQ40E, BYQ60E, PBYR4025WT, PBYR7025WT. Power

schottky and ultrafast epitaxial rectifiers in the SOT429 package (equivalent to JEDEC TO247). with current ratings up to 70A, low thermal resistance and reverse surge capability.

Hyperfast 600V Diodes

Intended for active power factor correction circuits, motor controls and other forced commutation applications. Featuring extremely fast reverse recovery (t_{rr} typ 19 ns) and low switching losses in the diode and the associated switching transistor. Types BYV1100, BYD1100, BYV2100, BYV4100, BYV99, BYM99, BYG85B, BYC5(B), BYC8(B), BYC10B) available in both conventional leaded and surface mount packages.

Surface Mount Products

Philips range of surface mount products continues to grow. New in this data handbook:- an extensive range of schottky and ultrafast epitaxial rectifiers in the SOT428 package (equivalent to JEDEC TO252).