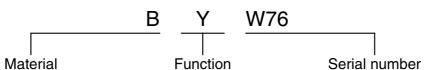


Conventions Used in Presenting Technical Data

Nomenclature for Semiconductor Devices According to Pro Electron

The part number of a semiconductor device consists of <u>two letters</u> followed by a <u>serial number</u>. For example:



The **first letter** indicates the material used for the active part of the device.

- A GERMANIUM (Materials with a bandgap 0.6-1.0 eV) ¹⁾
- B SILICON (Materials with a bandgap 1.0-1.3 eV) ¹⁾
- C GALLIUM-ARSENIDE (Materials with a bandgap > 1.3 eV) ¹⁾
- R COMPOUND MATERIALS (For example Cadmium-Sulphide)

The second letter indicates the circuit function.

- A DIODE: detection, switching or mixer
- B DIODE: variable capacitance
- C TRANSISTOR: low power, audio frequency
- D TRANSISTOR: power, audio frequency
- E DIODE: tunnel
- F TRANSISTOR: low power, high frequency
- G DIODE: oscillator and miscellaneous
- H DIODE: magnetic sensitive
- K HALL EFFECT DEVICE: in an open magnetic circuit
- L TRANSISTOR: power, high frequency

1) The materials mentioned are examples

M HALL EFFECT DEVICE:

- in a closed magnetic circuit
- N PHOTO COUPLER
- P DIODE: radiation sensitive
- Q DIODE: radiation generating
- R THYRISTOR: low power
- S TRANSISTOR: low power, switching
- T THYRISTOR: power
- U TRANSISTOR: power, switching
- X DIODE: multiplier, e.g. varactor, step recovery

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- Y DIODE: rectifying, booster
- Z DIODE: voltage reference or voltage regulator transient suppressor diode

The serial number consists of:

- A four digit number from 100 to 9999 for devices primarily intended for consumer equipment.
- One letter (P, Q, R, etc.) and a three-digit number from 10 to 999 for devices primarily intended for professional equipment.

A version letter can be used to indicate a deviation of a single characteristic, either electrical or mechanical. This letter does not have a fixed meaning. The only exceptions are the use of the letter R, indicating reversed pinning or bending and W indicating SOT323 or SOT343 package.