## Conventions used in Presenting Technical Data

## NOMENCLATURE FOR SEMICONDUCTOR DEVICES ACCORDING TO PRO ELECTRON

The type number of semiconductor devices consists of two letters followed by a serial number.
For example:


The first letter indicates the material used for the active part of the device.
A GERMANIUM
(Materials with a band gap 0.6 to 1.0 eV ) ${ }^{(1)}$
B SILICON ${ }^{2}$
(Materials with a band gap 1.0 to 1.3 eV ) ${ }^{(1)}$
C GALLIUM-ARSENIDE ${ }^{(2)}$
(Materials with a band gap > 1.3 eV ) ${ }^{(1)}$
R COMPOUND MATERIALS
(For instance cadmium-sulfide)
The second letter indicates the circuit function:
A DIODE: detection, switching, 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, miscellaneous
H DIODE: magnetic sensitive
K HALL EFFECT DEVICE: in an open magnetic circuit
L TRANSISTOR: power, high frequency
M HALL EFFECT DEVICE: in a closed magnetic circuit
N PHOTO COUPLER²)

I DIODE: radiation sensitive ${ }^{(2)}$
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
Y DIODE: rectifying, booster
Z DIODE: voltage reference or voltage regulator, transient suppressor diode
The serial number consists of:

- Three figures, running from 100 to 999 , for devices primarily intended for consumer equipment
- One letter (Z, Y, X, etc.) and two figures, running from 10 to 99 , for devices primarily intended for professional equipment
A version letter can be used to indicate a deviation of a single characteristic, either electrically or mechanically.
The letter never has a fixed meaning, the only exception being the letter R, indicating reversed voltage, i.e. collector to case.


## Notes

${ }^{(1)}$ The materials mentioned are examples
${ }^{(2)}$ Used for optoelectronic products

## TYPE DESIGNATION CODE FOR OPTOCOUPLERS

## Optocouplers



GENERAL OPTOCOUPLER NOMENCLATURE FOR BRT, IL, AND SFH SERIES


