

# Silicon transistors

## Component database

**This database contains component data, equivalent types and pinouts for more than 23,800 types of silicon transistors.**

### Displaying data

Enter the designation of the desired component in the **Search term (type)** field. The associated values will be displayed in the corresponding fields. The associated diagram will appear in the image field along with the pinout.

### Searching by parameters

Use the appropriate selection fields to search for transistors using specific parameters. The following parameters can be specified: polarity, voltage, current, power, package type, diagram, and Darlington/non-Darlington type.

For the voltage, current and power parameters, you can specify searching for values that are greater than or equal to ( $\geq$ ), less than or equal to ( $\leq$ ), or equal to ( $=$ ) the search value. Simply click on the appropriate symbol ahead of the selection field.

The parameter for the  $\beta$ -hfe value can be set separately. To do so, enable the  **$\beta$ -hfe** checkbox. This causes a new field to be displayed, in which you can also specify  $\geq$ ,  $\leq$ ,  $=$ , or a range (from-to).

After you click on the **Parameter search** button, all components that match the search criteria will be shown in the list at the right. Simply click on a component in the list to display its data.

### Adding a new component

Click on **New** in the **File** menu. *The input fields are highlighted in blue.*

Enter the values in the corresponding fields. You can select the diagram and package type from the selection lists.

Click on **OK** to copy the new component to the database.

### Modifying component data

If you wish to modify or supplement the data for a particular component, first select the component in question. Then select **Modify** in the **Edit** menu. *The input fields are highlighted in blue.*

Now you can modify the component data or add new data. The number of components of the type in question can be entered in the **Quantity** field. Click on the **OK** button to store the changes in the database.

### Deleting a component

If you wish to delete a particular component, first select the component in question. Then select **Delete** in the **Edit** menu.

Remember that deleted data cannot be restored!

### Displaying data from the database

To display component data directly from the database, open the database by selecting **Component list** in the **Options** menu.

Simply click on a device in the list to display its data.

You can also hide the database using the same menu item.