This example shows some new functions in the ECA semiconductor database.

I hope it helps to find suitable replacements.
Type/Part number
Description
Manufacturer
Replacement types
Marking code
Complementary

Maximum Ratings
- UCEB max: 60V
- UCED max: 50V
- UEE max: 5V
- IC max: 500mA
- ICM max: 800mA
- Pout max: 0.2W
- Tj max: 150°C

Characteristics
- B(tref) min: 100
- B(tref max): 560
- ft: 300MHz
- ton: 70ns
- toff: 400ns
- tr: 70ns
- UCE sat max: 0.2V
- UBE sat max: 1.2V
- IC80 max: 0.1μA
- IE80 max: 0.1μA
- CCEO: 3.7pF

TU 25°C

valid for
- lc: 10mA
- lc: 50mA
- lc: 100mA
- lc: 100mA
- In: 10mA

More info about the case outline: E25

Copyright © 2014 ECA All rights reserved.
**Data sheet for 2SC 3392**

**Type/Part number**

**Description**

**Manufacturer**

**Replacement types**

**Marking code**

**Complementary**

**Maximum Ratings**

- UCE\(_{\text{max}}\) 60V
- UCE\(_{\text{r}}\) 50V
- UEE\(_{\text{r}}\) 5V
- Ic\(_{\text{max}}\) 500mA
- ICM\(_{\text{max}}\) 800mA
- Ptot\(_{\text{max}}\) 0.2W
- Tj\(_{\text{max}}\) 150°C

**Characteristics**

- B(uA)\(_{\text{min}}\) 100
- B(uA)\(_{\text{max}}\) 560
- ft 300MHz
- n 70ns
- t\(_{\text{fs}}\) 400ns
- t\(_{\text{r}}\) 70ns
- UCEO\(_{\text{sat max}}\) 0.2V
- UBE\(_{\text{sat max}}\) 1.2V
- ICB\(_{\text{r}}\) 0.1\(\mu\)A
- IEB\(_{\text{r}}\) 0.1\(\mu\)A
- C\(_{\text{cbe}}\) 3.7pF

**More info about the case outline:** E25

**Maximum ratings and characteristics for this type.** Move the mouse cursor above the icon and an explanation appear.
Data sheet for 2SC 3392

Type: 2SC 3392
Text: SMD, 5, 60V, 500mA
Device: Silicon NPN-transistor
Prod.: Sanyo
Comparison type: BSS 14, BSS 79, BSS 81
SMD Marking Code: 2SA138
Complementary: 2SA138

Maximum Ratings
- UCEB max: 60V
- IC max: 500mA
- UCEB max: 5V
- IC max: 800mA
- Ptot max: 0,2W
- Tj max: 150°C

Characteristics
- Bhf(min) 100
- Bhf(max) 560
- tao 400ns
- trr 70ns
- UCE(max) 0,3V
- UEE(max) 1,2V
- ICE(max) 0,1mA
- ICB(max) 0,1mA
- fr 300MHz
- fr 70ns
- fr 70ns
- fr 300MHz@IC=50mA
- fr 70ns@IC=100mA
- fr 300MHz@IC=20mA
- fr 50MHz@IC=10mA
- fr 100MHz@IC=10mA

Selection guide: BS/1, BS/2

More info about the case outline: E25

Something new!
Please click on the small icon (scale) to see the difference of the replacement types.
The list shows all parametrics of the replacement types on one page. The types are sorted by relevance, closed to the original type. Clicking on the partnumber will open the data sheet, the red cross will remove the type from the list. Green background means the value is equal to the original type, yellow the value of the replacement is higher, red the value is lower.
An other new function! Enter at least 4 letters into the input field and the script search for this type number and a list with type, device and package form will appear. If you move the cursor above the type number additional info will be shown. The checkbox will add the type to your personal replacement list.
You can choose different types, all you can find in your workshop. At the end click on the small icon (scale).
This list shows all parametric values of each type. You can also view the pinout by clicking on the link in the "case" column. The shop icon search in several online shops for this type. Please check carefully all important values, at least voltage and current. This transistor (2SC3932) has a high ft so the replacement should have similar values. Also, ton/toff can be critical, but I think a technician can evaluate it depending on the application of the circuits.
This is just a sample for the transistor data sheet, it also works in the other database for discrete components.

Please send us your suggestion, critics and comments.

You can reach us by email info@eca.de, facebook or our website.