



# SEMICONDUCTORS

EIAJ Type No.  
2SB493

## GERMANIUM PNP ALLOY JUNCTION TRANSISTOR

### APPLICATION:

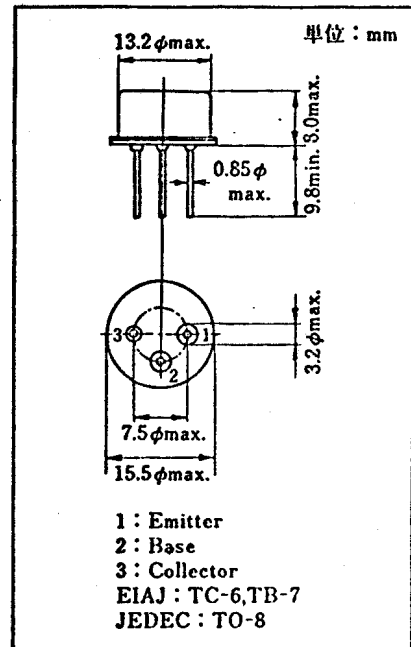
- Strobe/DC Converter

### FEATURES:

- Low Collector-Emitter Saturation Voltage

### ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

|  |           |
|--|-----------|
| Collector-Base Voltage (-V <sub>CB0</sub> ) .....    | 40V       |
| Collector-Emitter Voltage (-V <sub>CE0</sub> ) ..... | 20V       |
| Emitter-Base Voltage (-V <sub>EB0</sub> ) .....      | 14V       |
| Collector Current (-I <sub>C</sub> ) .....           | 3A        |
| Peak Collector Current (-I <sub>CM</sub> ) .....     | 5A        |
| Power Dissipation (P <sub>C</sub> ) .....            | 9W        |
| Junction Temperature (T <sub>j</sub> ) .....         | 90°C      |
| Storage Temperature (T <sub>stg</sub> ) .....        | -55~+75°C |



### ELECTRICAL CHARACTERISTICS (Ta=25°C)

| Characteristic           | Symbol            | Conditions                                 | Min. | Typ. | Max. | Unit |
|--------------------------|-------------------|--|------|------|------|------|
| Collector Cutoff Current | -I <sub>CEO</sub> | -V <sub>CE</sub> =20V, I <sub>B</sub> =0   |      |      | 10   | mA   |
| Collector Cutoff Current | -I <sub>CB0</sub> | -V <sub>CB</sub> =40V, I <sub>E</sub> =0   |      |      | 1    | mA   |
| Emitter Cutoff Current   | -I <sub>EB0</sub> | -V <sub>CB</sub> =10V, I <sub>C</sub> =0   |      |      | 1    | mA   |
| DC Current Gain          | h <sub>FE</sub>   | -V <sub>CB</sub> =0, I <sub>E</sub> =3A    | 40   |      |      |      |
| Transition Frequency     | f <sub>T</sub>    | -V <sub>CB</sub> =2V, I <sub>E</sub> =0.1A | 300  |      |      | KHz  |
|                          |                   |  |      |      |      |      |
|                          |                   |  |      |      |      |      |

The device specifications are subject to change for improvement without prior notice.