# **Excellent Integrated System Limited**

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Fairchild Semiconductor MJE340STU

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## **MJE340**

### **High Voltage General Purpose Applications**

- High Collector-Emitter Breakdown Voltage
- Suitable for Transformer
- Complement to MJE350



## **NPN Epitaxial Silicon Transistor**

### Absolute Maximum Ratings T<sub>C</sub>=25°C unless otherwise noted

| Symbol           | Parameter                                    | Value      | Units |
|------------------|--|------------|-------|
| V <sub>CBO</sub> | Collector-Base Voltage                       | 300        | V     |
| V <sub>CEO</sub> | Collector-Emitter Voltage                    | 300        | V     |
| V <sub>EBO</sub> | Emitter-Base Voltage                         | 5          | V     |
| I <sub>C</sub>   | Collector Current                            | 500        | mA    |
| P <sub>C</sub>   | Collector Dissipation (T <sub>C</sub> =25°C) | 20         | W     |
| T <sub>J</sub>   | Junction Temperature                         | 150        | °C    |
| T <sub>STG</sub> | Storage Temperature                          | - 65 ~ 150 | °C    |

# $\textbf{Electrical Characteristics} \ \, \textbf{T}_{\text{C}} = 25^{\circ} \text{C unless otherwise noted}$

| Symbol            | Parameter                           | Test Condition                            | Min. | Max. | Units |
|-------------------|-------------------------------------|---|------|------|-------|
| BV <sub>CEO</sub> | Collector-Emitter Breakdown Voltage | $I_C = 1 \text{mA}, I_B = 0$              | 300  |      | V     |
| I <sub>CBO</sub>  | Collector Cut-off Current           | V <sub>CB</sub> = 300V, I <sub>E</sub> =0 |      | 100  | μΑ    |
| I <sub>EBO</sub>  | Emitter Cut-off Current             | $V_{BE} = 3V, I_{C} = 0$                  |      | 100  | μΑ    |
| h <sub>FE</sub>   | DC Current Gain                     | $V_{CE} = 10V, I_{C} = 50mA$              | 30   | 240  |       |

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## **Typical Characteristics**

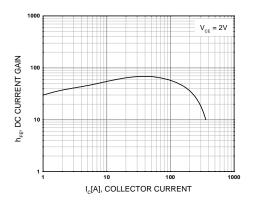


Figure 1. DC current Gain

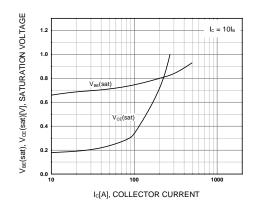


Figure 2. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

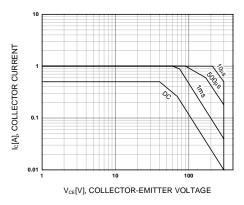


Figure 3. Safe Operating Area

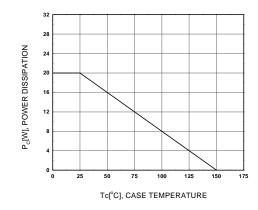


Figure 4. Power Derating

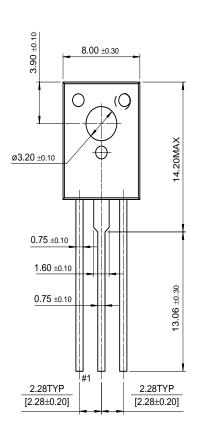
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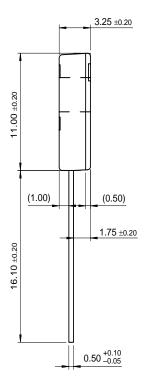
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TO-126







**Dimensions in Millimeters** 

# **Distributor of Fairchild Semiconductor: Excellent Integrated System Limited**Datasheet of MJE340STU - TRANS NPN 300V 0.5A TO-126

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