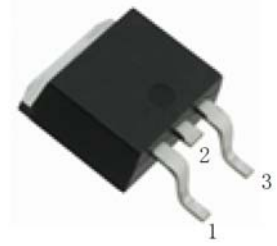


# TIP32CR

## PNP Silicon Epitaxial Planar Transistor

for power switching and amplifier applications



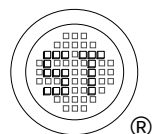
1.Base 2.Collector 3.Emitter  
TO-252 Plastic Package

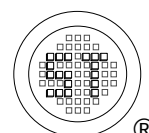
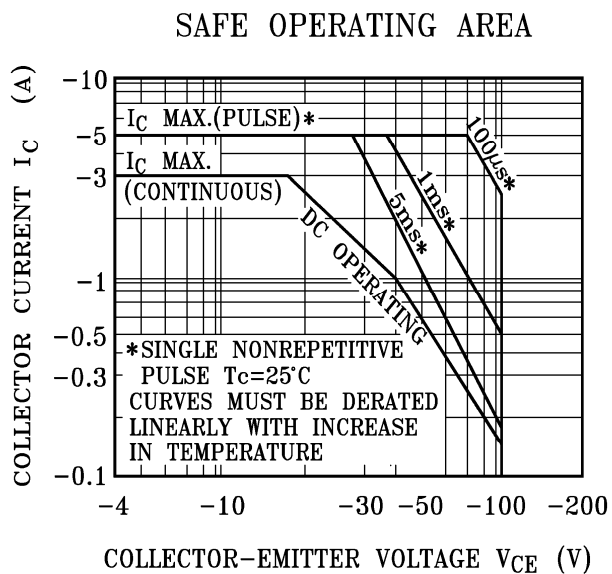
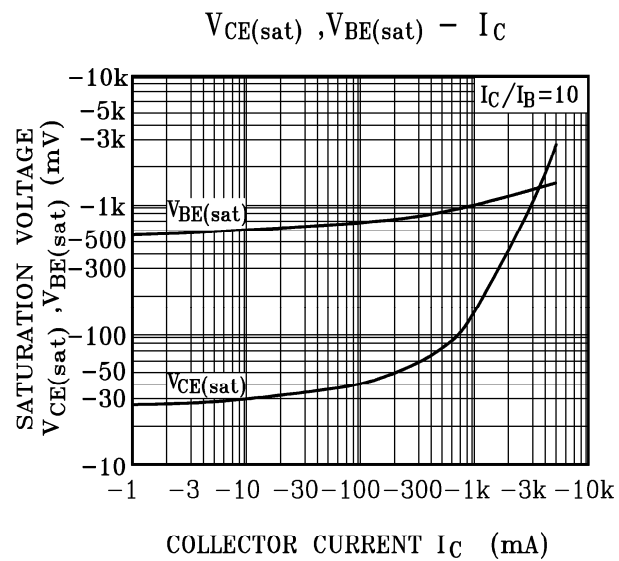
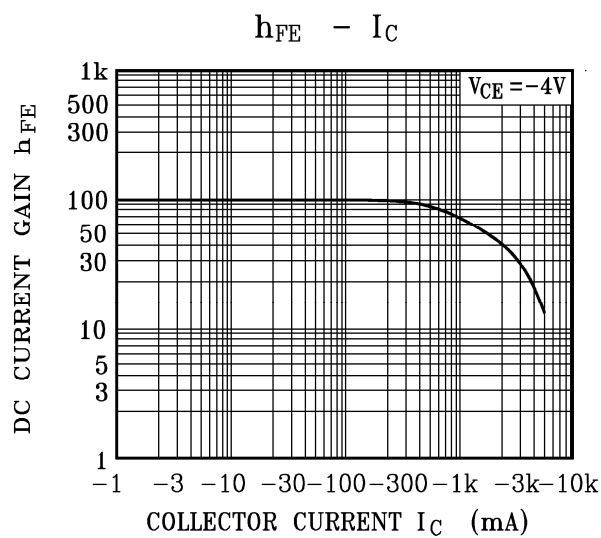
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter                                      | Symbol     | Value         | Unit             |
|------------------------------------------------|------------|---------------|------------------|
| Collector Base Voltage                         | $-V_{CBO}$ | 100           | V                |
| Collector Emitter Voltage                      | $-V_{CEO}$ | 100           | V                |
| Emitter Base Voltage                           | $-V_{EBO}$ | 5             | V                |
| Collector Current                              | $-I_C$     | 3             | A                |
| Collector Current (Pulse)                      | $-I_{CP}$  | 5             | A                |
| Base Current                                   | $-I_B$     | 1             | A                |
| Power Dissipation ( $T_a = 25^\circ\text{C}$ ) | $P_{tot}$  | 1             | W                |
| Power Dissipation ( $T_c = 25^\circ\text{C}$ ) | $P_{tot}$  | 20            | W                |
| Junction Temperature                           | $T_j$      | 150           | $^\circ\text{C}$ |
| Storage Temperature Range                      | $T_{stg}$  | - 65 to + 150 | $^\circ\text{C}$ |

### Characteristics at $T_a = 25^\circ\text{C}$

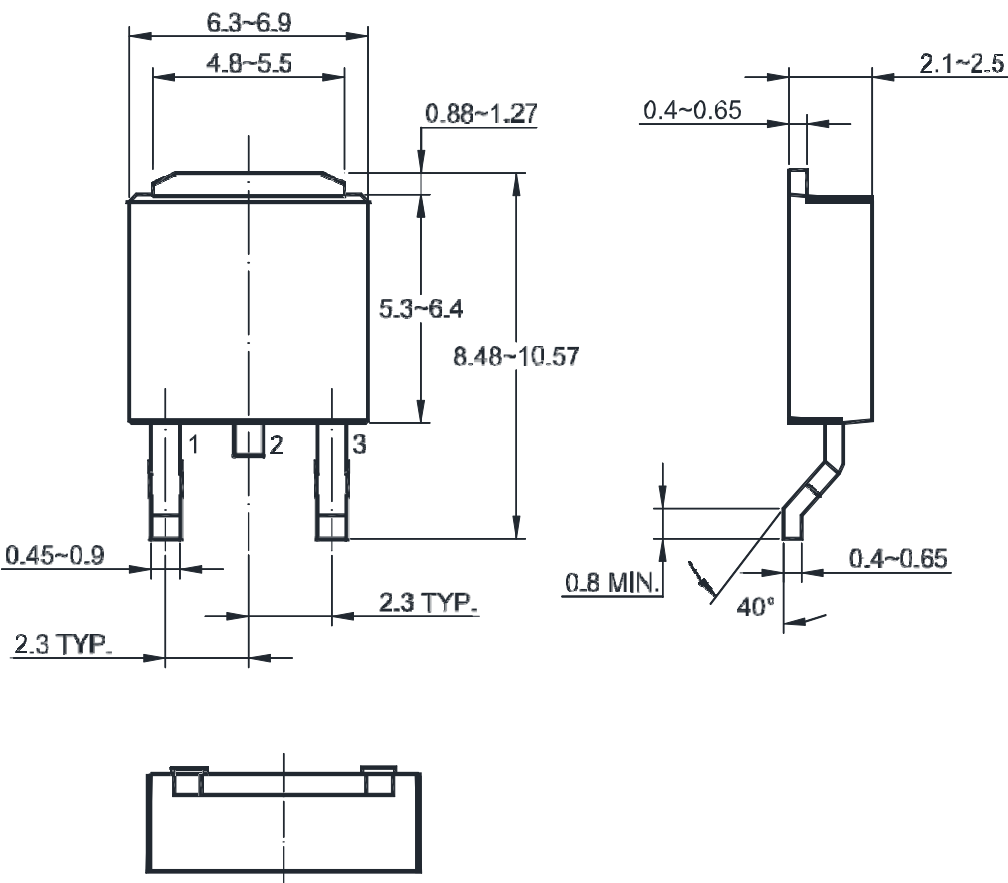
| Parameter                                                                                                             | Symbol               | Min.     | Max.    | Unit   |
|-----------------------------------------------------------------------------------------------------------------------|----------------------|----------|---------|--------|
| DC Current Gain<br>at $-V_{CE} = 4\text{ V}$ , $-I_C = 1\text{ A}$<br>at $-V_{CE} = 4\text{ V}$ , $-I_C = 3\text{ A}$ | $h_{FE}$<br>$h_{FE}$ | 25<br>10 | -<br>50 | -<br>- |
| Collector Emitter Sustaining Voltage<br>at $-I_C = 30\text{ mA}$                                                      | $-V_{CEO(sus)}$      | 100      | -       | V      |
| Collector Cutoff Current<br>at $-V_{CE} = 100\text{ V}$                                                               | $-I_{CES}$           | -        | 0.2     | mA     |
| Collector Cutoff Current<br>at $-V_{CE} = 60\text{ V}$                                                                | $-I_{CEO}$           | -        | 0.3     | mA     |
| Emitter Cutoff Current<br>at $-V_{EB} = 5\text{ V}$                                                                   | $-I_{EBO}$           | -        | 1       | mA     |
| Collector Emitter Saturation Voltage<br>at $-I_C = 3\text{ A}$ , $-I_B = 375\text{ mA}$                               | $-V_{CE(sat)}$       | -        | 1.2     | V      |
| Base Emitter On Voltage<br>at $-V_{CE} = 4\text{ V}$ , $-I_C = 3\text{ A}$                                            | $-V_{BE(on)}$        | -        | 1.8     | V      |
| Transition Frequency<br>at $-V_{CE} = 10\text{ V}$ , $-I_C = 500\text{ mA}$ , $f = 1\text{ MHz}$                      | $f_T$                | 3        | -       | MHz    |





Package Outline Dimensions (Units: mm)

TO-252



Recommended Soldering Footprint

