Ordering number : ENA0583A

# 2SA2202

## Bipolar Transistor
## −100V, −2A, Low $V_{CE}$(sat) PNP Single PCP

ON Semiconductor®
http://onsemi.com

### Applicaitons
- DC / DC converters, relay drivers, lamp drivers, motor drivers, flash

### Features
- Adoption of FBET, MBIT processes
- Low collector to emitter saturation voltage
- High allowable power dissipation
- Large current capacity
- High-speed switching

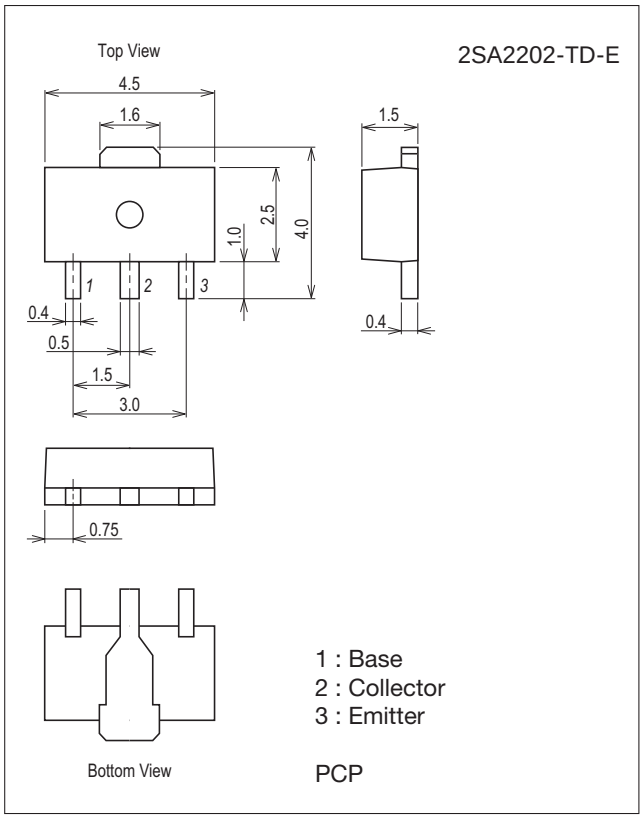
### Specifications
**Absolute Maximum Ratings** at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | | −100 | V |
| Collector to Emitter Voltage | $V_{CES}$ | | −100 | V |
| | $V_{CEO}$ | | −100 | V |
| Emitter to Base Voltage | $V_{EBO}$ | | −7 | V |
| Collector Current | $I_C$ | | −2 | A |
| Collector Current (Pulse) | $I_{CP}$ | | −3 | A |

Continued on next page.

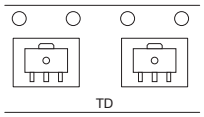
Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

### Package Dimensions
unit : mm (typ)
7007B-004

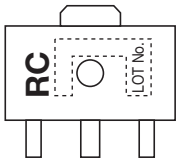



### Product & Package Information
- Package : PCP
- JEITA, JEDEC : SC-62, SOT-89, TO-243
- Minimum Packing Quantity : 1,000 pcs./reel

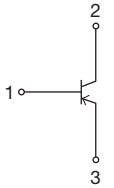
### Packing Type: TD



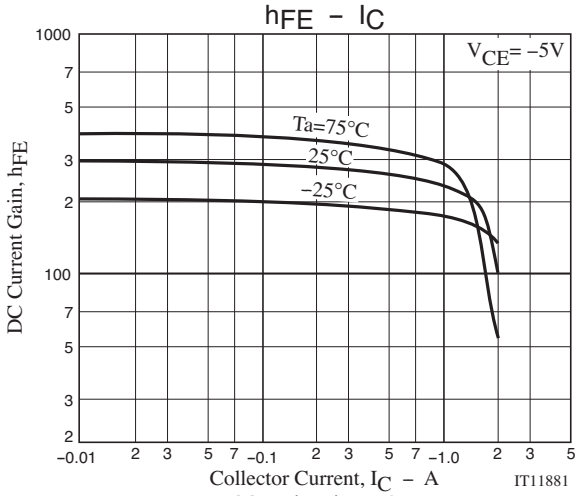

### Marking

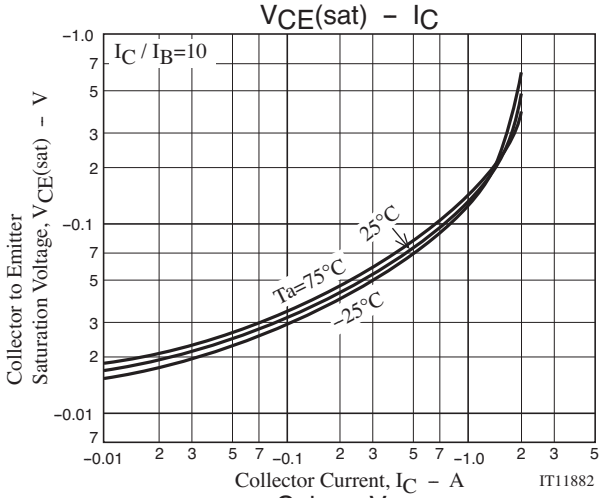


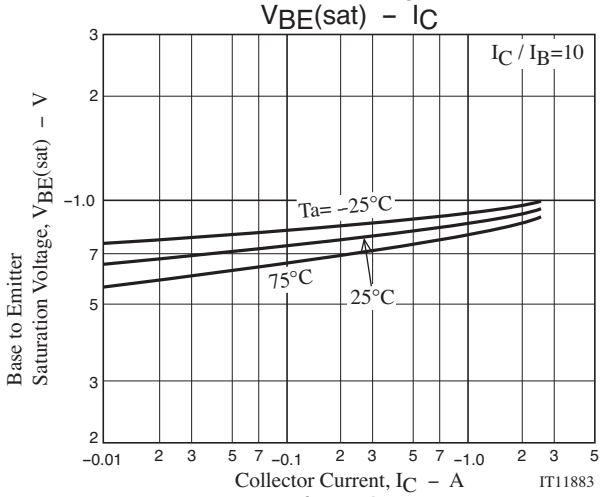

### Electrical Connection

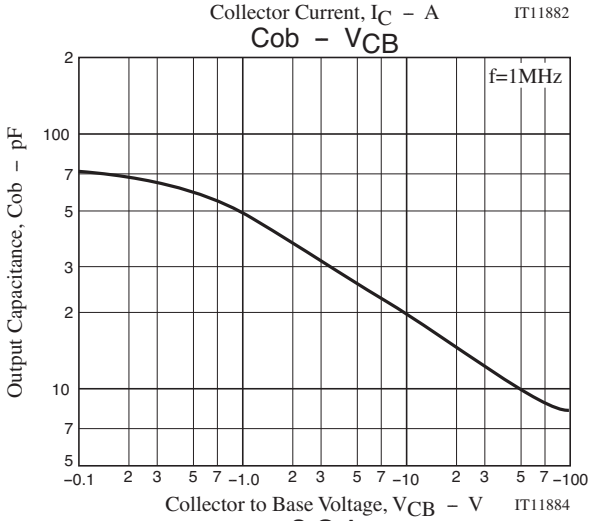


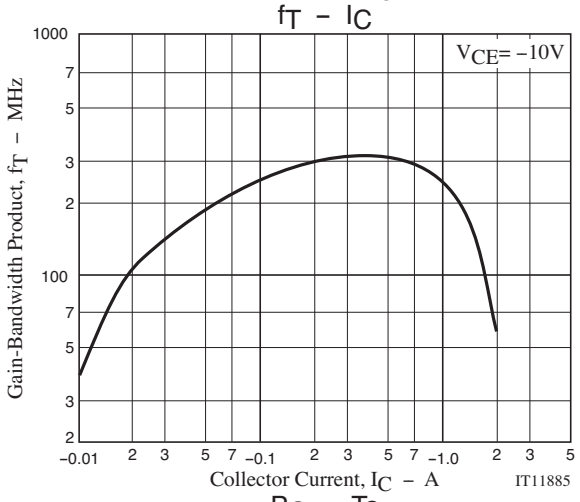

Semiconductor Components Industries, LLC, 2014

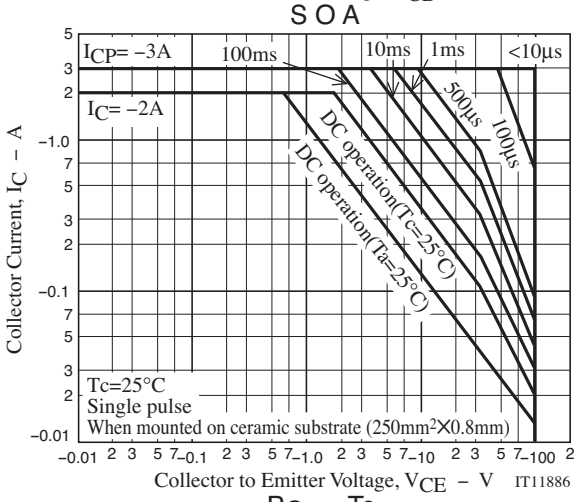

hFE – IC
VCE= –5V
Ta=75°C
25°C
–25°C
DC Current Gain, hFE
Collector Current, IC – A
IT11881

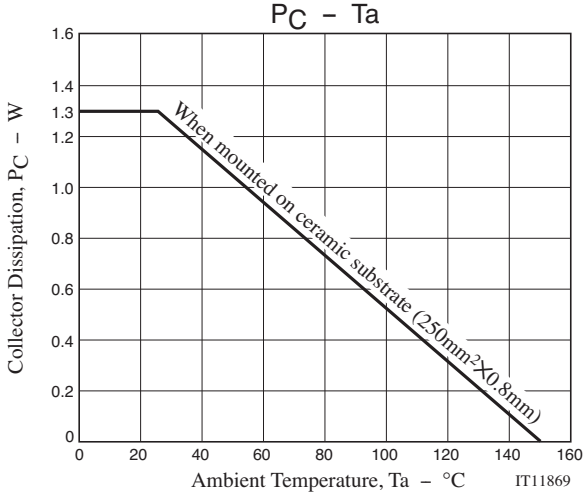

VCE(sat) – IC
IC / IB=10
25°C
Ta=75°C
–25°C
Collector to Emitter Saturation Voltage, VCE(sat) – V
Collector Current, IC – A
IT11882

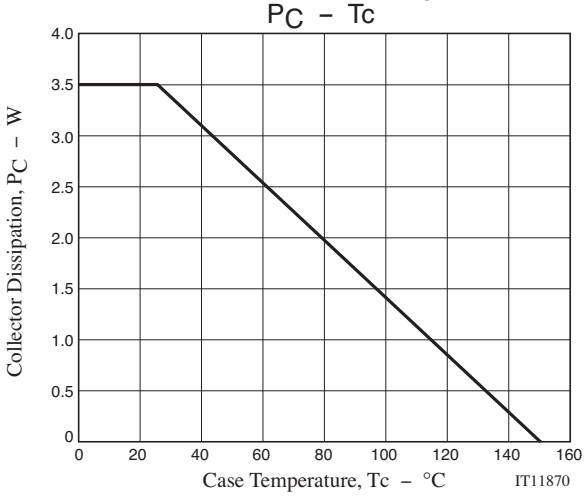

VBE(sat) – IC
IC / IB=10
Ta= –25°C
75°C
25°C
Base to Emitter Saturation Voltage, VBE(sat) – V
Collector Current, IC – A
IT11883


Cob – VCB
f=1MHz
Output Capacitance, Cob – pF
Collector to Base Voltage, VCB – V
IT11884


fT – IC
VCE= –10V
Gain-Bandwidth Product, fT – MHz
Collector Current, IC – A
IT11885

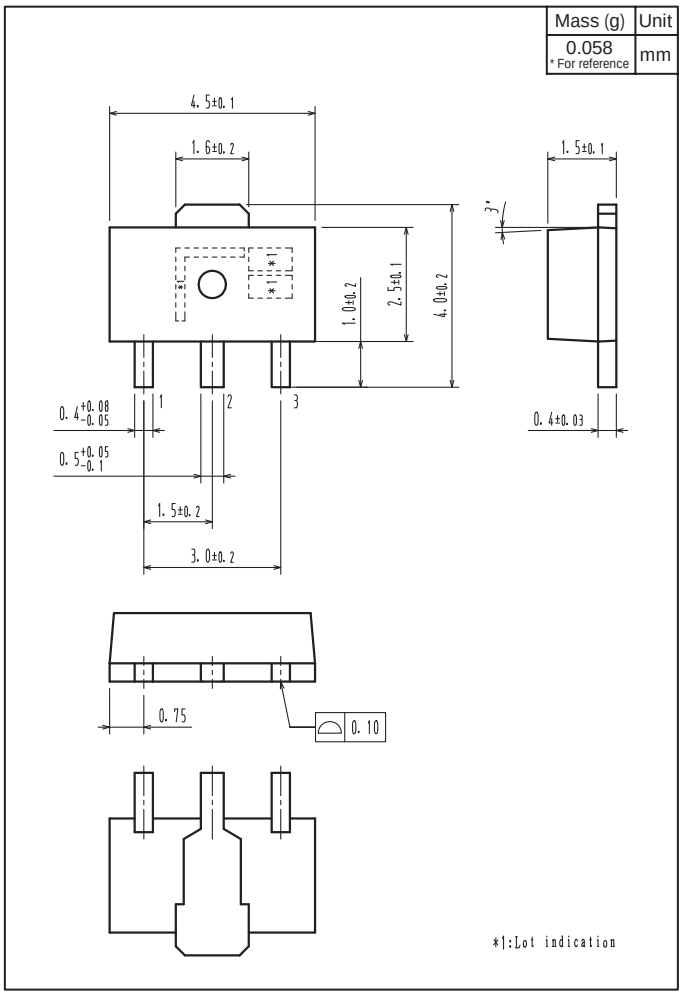

S O A
ICP= –3A
100ms
10ms
1ms
<10µs
IC= –2A
500µs
100µs
DC operation(Tc=25°C)
DC operation(Ta=25°C)
Tc=25°C
Single pulse
When mounted on ceramic substrate (250mm2×0.8mm)
Collector Current, IC – A
Collector to Emitter Voltage, VCE – V
IT11886


PC – Ta
When mounted on ceramic substrate (250mm2×0.8mm)
Collector Dissipation, PC – W
Ambient Temperature, Ta – °C
IT11869

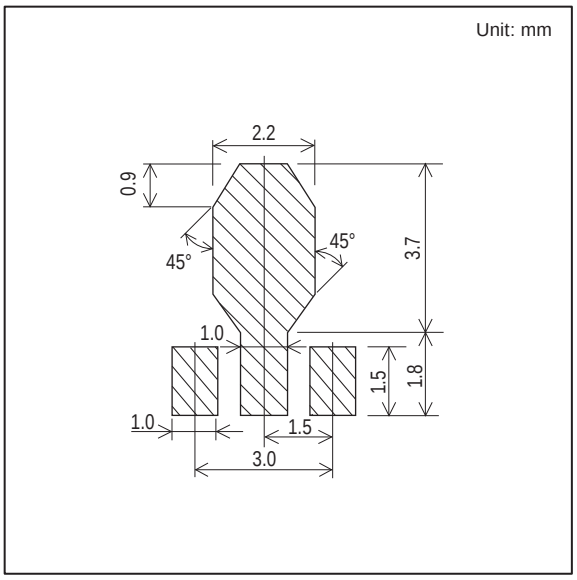

PC – Tc
Collector Dissipation, PC – W
Case Temperature, Tc – °C
IT11870

## Outline Drawing

2SA2202-TD-E




## Land Pattern Example

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