## General Purpose PNP Epitaxial Planar Transistor

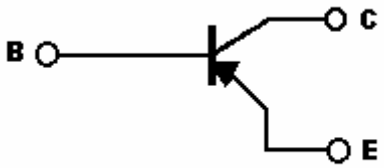
# BTPA64N3

## Description

- The BTPA64N3 is a darlington amplifier transistor
- Complementary to BTNA14N3.

## Symbol

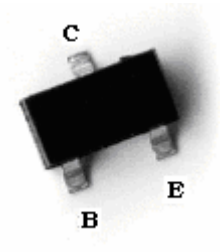
BTPA64N3




B：Base
C：Collector
E：Emitter

## Outline

SOT-23




## Absolute Maximum Ratings (Ta=25°C)

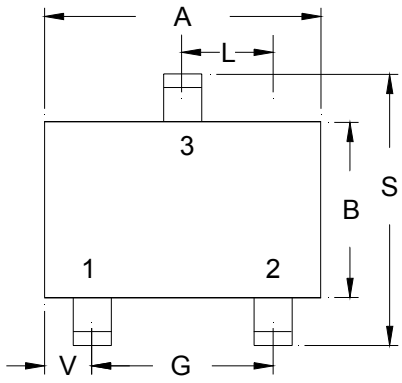
| Parameter | Symbol | Limits | Unit |
|---|---|---|---|
| Collector-Base Voltage | $V_{CBO}$ | -30 | V |
| Collector-Emitter Voltage | $V_{CES}$ | -30 | V |
| Emitter-Base Voltage | $V_{EBO}$ | -10 | V |
| Collector Current | $I_C$ | -0.5 | A |
| Power Dissipation | Pd | 225 | mW |
| Junction Temperature | Tj | 150 | °C |
| Storage Temperature | Tstg | -55~+150 | °C |

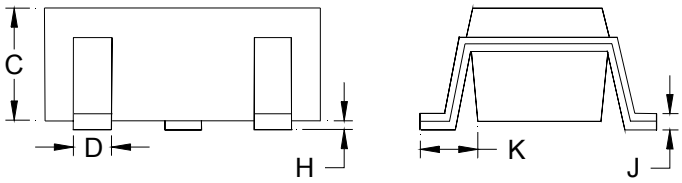
## Characteristics (Ta=25°C)

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|---|---|---|---|---|---|
| $BV_{CES}$ | -30 | - | - | V | $I_C$=-100μA |
| $I_{CBO}$ | - | - | -100 | nA | $V_{CE}$=-30V |
| $I_{EBO}$ | - | - | -100 | nA | $V_{EB}$=10V |
| *$V_{CE(sat)}$ | - | - | -1.5 | V | $I_C$=-100mA, $I_B$=-0.1mA |
| *$V_{BE(on)}$ | - | - | -2.0 | V | $V_{CE}$=-5V, $I_C$=-100mA |
| *$h_{FE}1$ | 10K | - | - | - | $V_{CE}$=-5V, $I_C$=-10mA |
| *$h_{FE}2$ | 20K | - | - | - | $V_{CE}$=-5V, $I_C$=-100mA |
| $f_T$ | 125 | - | - | MHz | $V_{CE}$=-5V, $I_C$=-100mA, f=100MHz |

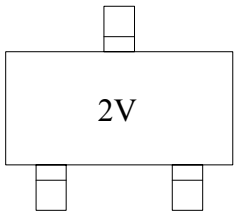
*Pulse Test: Pulse Width ≤380μs, Duty Cycle≤2%

## SOT-23 Dimension




Marking:




3-Lead SOT-23 Plastic
Surface Mounted Package
CYStek Package Code: N3

Style: Pin 1.Base 2.Emitter 3.Collector

*: Typical

| DIM | Inches | | Millimeters | | DIM | Inches | | Millimeters | |
|---|---|---|---|---|---|---|---|---|---|
| | Min. | Max. | Min. | Max. | | Min. | Max. | Min. | Max. |
| A | 0.1102 | 0.1204 | 2.80 | 3.04 | J | 0.0034 | 0.0070 | 0.085 | 0.177 |
| B | 0.0472 | 0.0630 | 1.20 | 1.60 | K | 0.0128 | 0.0266 | 0.32 | 0.67 |
| C | 0.0335 | 0.0512 | 0.89 | 1.30 | L | 0.0335 | 0.0453 | 0.85 | 1.15 |
| D | 0.0118 | 0.0197 | 0.30 | 0.50 | S | 0.0830 | 0.1083 | 2.10 | 2.75 |
| G | 0.0669 | 0.0910 | 1.70 | 2.30 | V | 0.0098 | 0.0256 | 0.25 | 0.65 |
| H | 0.0005 | 0.0040 | 0.013 | 0.10 | | | | | |

Notes: 1.Controlling dimension: millimeters.
2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0