

PNP Epitaxial Planar Transistor

BF423A3/S

Description

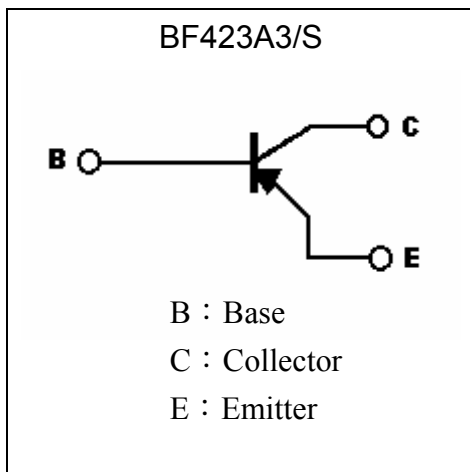
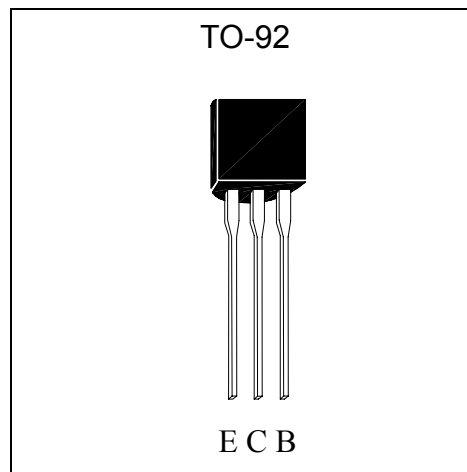
- PNP high voltage transistors in a TO-92 plastic package.
- Complementary to BF422A3/S.
- Pb-free package is available

Features

- Low feedback capacitance.

Applications

- Class-B video output stages in color television and professional monitor equipment.

Symbol

Outline

Absolute Maximum Ratings (Ta=25°C)

| Parameter | Symbol | Conditions | Min | Max | Unit |
|-------------------------------|------------------|-------------------------------|-----|------|------|
| Collector-Base Voltage | V _{CB0} | Open emitter | - | -250 | V |
| Collector-Emitter Voltage | V _{CE0} | Open base | - | -250 | V |
| Emitter-Base Voltage | V _{EB0} | Open collector | - | -5 | V |
| Collector Current (DC) | I _C | | - | -50 | mA |
| Peak Collector Current | I _{CM} | | - | -100 | mA |
| Peak Base Current | I _{BM} | | - | -50 | mA |
| Power Dissipation | P _d | T _{amb} ≤ 25°C, Note | - | 830 | mW |
| Junction Temperature | T _j | | - | 150 | °C |
| Storage Temperature | T _{stg} | | -65 | +150 | °C |
| Operating Ambient Temperature | T _{amb} | | -65 | +150 | °C |

Note : Transistor mounted on a printed-circuit board.

**Characteristics (Ta=25°C)**

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|-----------------------|------|------|------|------|--|
| BV _{CBO} | -250 | - | - | V | I _C =-100μA, I _E =0 |
| BV _{CEO} | -250 | - | - | V | I _C =-1mA, I _B =0 |
| BV _{EBO} | -5 | - | - | V | I _E =-10μA, I _C =0 |
| I _{CBO} | - | - | -10 | nA | V _{CB} =-200V, I _E =0 |
| | - | - | -10 | μA | I _E =0, V _{CB} =-200V, T _j =150°C |
| I _{EBO} | - | - | -50 | nA | V _{EB} =-5V, I _C =0 |
| *V _{CE(sat)} | - | - | -0.6 | V | I _C =-30mA, I _B =-5mA |
| *h _{FE} | 50 | - | - | - | V _{CE} =-20V, I _C =-25mA |
| Cre | - | - | 1.6 | pF | I _C =i _C =0, V _{CE} =-30V, f=1MHz |
| f _T | 60 | - | - | MHz | V _{CE} =-10V, I _C =-10mA, f=100MHz |

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

Thermal Characteristics

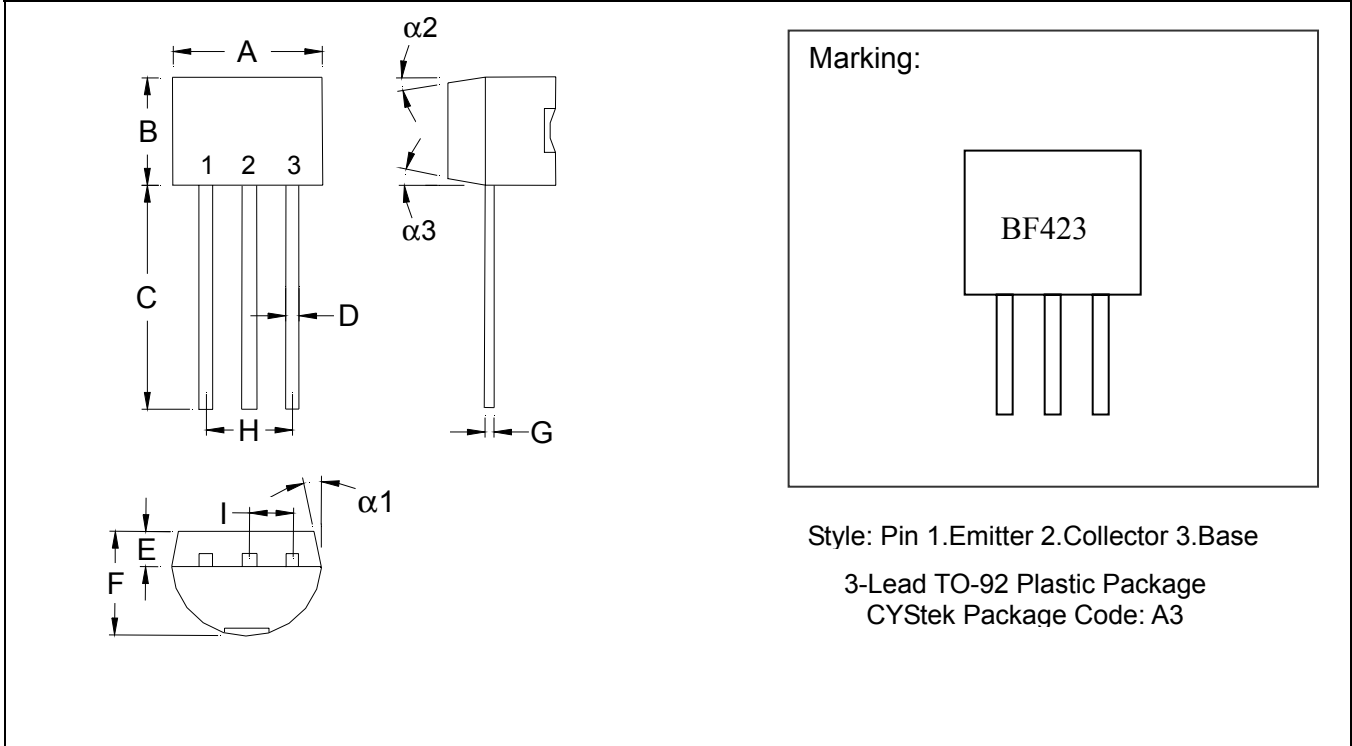
| Symbol | Parameter | Conditions | Value | Unit |
|-------------------|---|------------|-------|------|
| R _{thJA} | Thermal resistance from junction to ambient | Note | 150 | K/W |

Note : Transistor mounted on a printed-circuit board.

Ordering Information

| Device | Package | Shipping |
|----------|--------------------|-----------------------|
| BF423A3 | TO-92 | 2000 pcs / tape & box |
| BF423A3S | TO-92 (Pb-free) | 2000 pcs / tape & box |

TO-92 Dimension



*: Typical

| DIM | Inches | | Millimeters | | DIM | Inches | | Millimeters | |
|-----|--------|---------|-------------|-------|------------|--------|---------|-------------|-------|
| | Min. | Max. | Min. | Max. | | Min. | Max. | Min. | Max. |
| A | 0.1704 | 0.1902 | 4.33 | 4.83 | G | 0.0142 | 0.0220 | 0.36 | 0.56 |
| B | 0.1704 | 0.1902 | 4.33 | 4.83 | H | - | *0.1000 | - | *2.54 |
| C | 0.5000 | - | 12.70 | - | I | - | *0.0500 | - | *1.27 |
| D | 0.0142 | 0.0220 | 0.36 | 0.56 | $\alpha 1$ | - | *5° | - | *5° |
| E | - | *0.0500 | - | *1.27 | $\alpha 2$ | - | *2° | - | *2° |
| F | 0.1323 | 0.1480 | 3.36 | 3.76 | $\alpha 3$ | - | *2° | - | *2° |

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

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