Ordering number: EN4724



FP213

PNP Epitaxial Planar Silicon Transistor

Motor Driver Applications

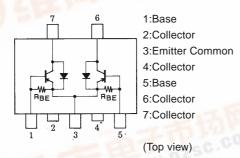
Features

· Composite type with 2 PNP transistors facilitating high-density mounting.

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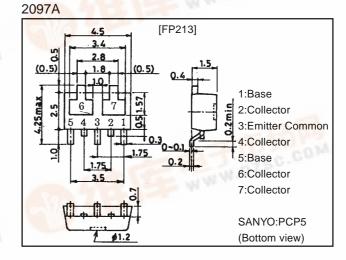
• The FP213 is composed of 2 chips, each being equivalent to the 2SB1397, placed in one package.

Electrical Connection



Package Dimensions

unit:mm



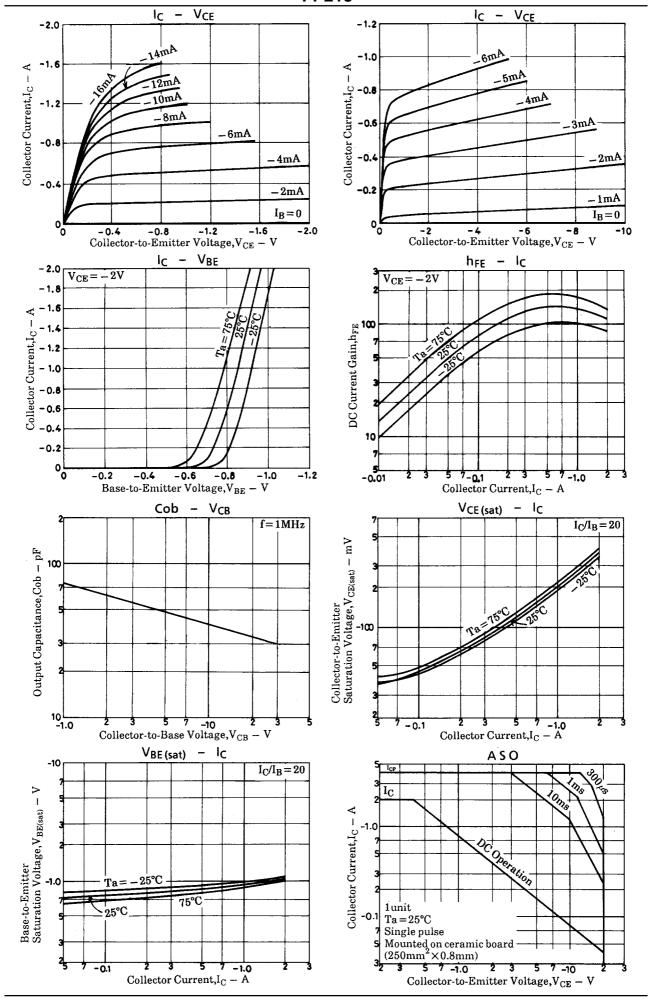
Specifications

Absolute Maximum Ratings at Ta = 25°C

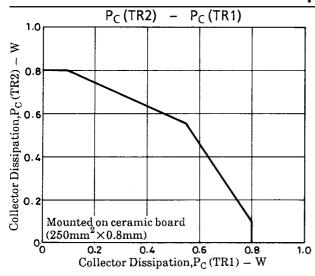
| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|------------------|---|-------------|------|
| Collector-to-Base Voltage | VCBO | 140 | -25 | V |
| Collector-to-Emitter Voltage | VCEO | | -20 | V |
| Emitter-to-Base Voltage | V _{EBO} | 112 12 | -6 | V |
| Collector Current | IC | 475 715 1-5 | -2 | Α |
| Collector Current (Pulse) | ICP | - N/A | -4 | Α |
| Base Current | IB | The second | -400 | mA |
| Collector Dissipation | PC | Mounted on ceramic board (250mm ² ×0.8mm) 1 unit | 0.8 | W |
| Total Power Dissipation | PT | Mounted on ceramic board (250mm ² ×0.8mm) | 1.1 | W |
| Junction Temperature | Tj | | 150 | °C |
| Storage Temperature | Tstg | | -55 to +150 | °C |

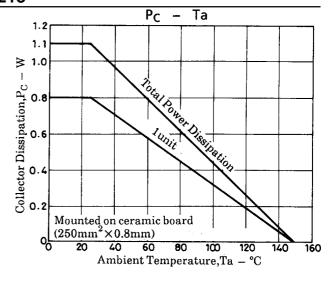
Electrical Characteristics at Ta=25°C

| Doromotor | Symbol | Conditons | 10 | Ratings | | |
|----------------------------|------------------------|---|-----|---------|------|------|
| Parameter | Symbol | Conditons | min | typ | max | Unit |
| Collector Cutoff Current | I _{CBO} | V _{CB} =-20V, I _E =0 | | M.D. | -1 | μΑ |
| DC Current Gain | h _{FE} 1 | V _{CE} =-2V, I _C =-0.5A | 70 | | | |
| | h _{FE} 2 | V _{CE} =-2V, I _C =-2A | 50 | | | |
| Gain-Bandwidth Product | f _T | V _{CE} =-2V, I _C =-0.5A | | 300 | | MHz |
| Output Capacitance | Cob | V _{CB} =-10V, f=1MHz | | 40 | | pF |
| C-E Saturation Voltage | VCE(sat) | I _C =-1A, I _B =-50mA | | -0.25 | -0.5 | V |
| B-E Saturation Voltage | V _{BE(sat)} | I _C =-1A, I _B =-50mA | | | -1.5 | V |
| C-B Breakdown Voltage | V _(BR) CBO | I _C =-10μA, I _E =0 | -25 | | | V |
| C-E Breakdown Voltage | V _{(BR)CEO} 1 | I _C =-10mA, R _{BE} =∞ | -25 | | | V |
| | V(BR)CEO ² | I _E =−10mA, R _{BE} =∞ | -20 | | | V |
| Diode Forward Voltage | V _F | I _F =0.5A | | | -1.5 | V |
| Base-to-Emitter Resistance | R _{BE} | | | 1.6 | | kΩ |



FP213





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