

2SC3710

Silicon NPN Transistors



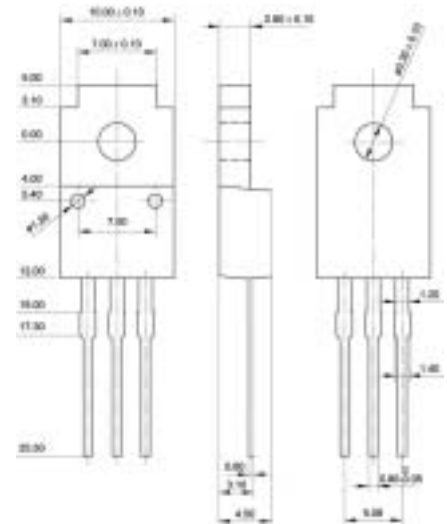
BCE

◆ Features

- . With TO-220Fa package
- . Complement to type 2SA1452
- . High current switching applications

◆ Absolute Maximum Ratings Tc=25°C

| SYMBOL | PARAMETER | RATING | UNIT |
|------------------|------------------------------|---------|------|
| V _{CB0} | Collector to base voltage | 80 | V |
| V _{CEO} | Collector to emitter voltage | 80 | V |
| V _{EBO} | Emitter to base voltage | 6 | V |
| I _B | Base current | 2 | A |
| I _C | Collector current | 12 | A |
| P _C | Collector power dissipation | 30 | W |
| T _j | Junction temperature | 150 | °C |
| T _{stg} | Storage temperature | -55~150 | °C |



TO-220Fa

◆ Electrical Characteristics Tc=25°C

| SYMBOL | PARAMETER | CONDITIONS | MIN | Typ. | MAX | UNIT |
|------------------------|---------------------------------------|--|-----|------|-----|------|
| I _{CB0} | Collector cut-off current | V _{CB} =80V; I _E =0 | | | 10 | uA |
| I _{EBO} | Emitter cut-off current | V _{EB} =6V; I _C =0 | | | 10 | uA |
| V _{CB0} | Collector-base breakdown voltage | | | | | |
| V _{CEO} | Collector-emitter breakdown voltage | I _C =50mA; I _B =0 | 80 | | | V |
| V _{EBO} | Emitter-base breakdown voltage | | | | | |
| V _{CE(sat-1)} | Collector-emitter saturation voltages | I _C =6A; I _B =0.3A | | | 0.4 | V |
| V _{CE(sat-2)} | Collector-emitter saturation voltages | | | | | |
| h _{FE-1} | Forward current transfer ratio | I _C =1A; V _{CE} =1V | 70 | | 240 | |
| h _{FE-2} | Forward current transfer ratio | I _C =6A; V _{CE} =1V | 40 | | | |
| V _{BE(sat-1)} | Base-emitter saturation voltages | I _C =6A; I _B =0.3A | | | 1.2 | V |
| V _{BE(sat-2)} | Base-emitter saturation voltages | | | | | |
| f _T | Transition frequency | I _C =1A; V _{CE} =5V | | 80 | | MHz |
| C _{ob} | Collector Out put Capacitance | V _{CB} =10V; f=1MHz | | 220 | | pF |

◆ h_{FE-1} Classifications

| O | Y |
|--------|---------|
| 70-140 | 120-240 |