# G6718

**NPN EPITAXIAL PLANAR TRANSISTOR**

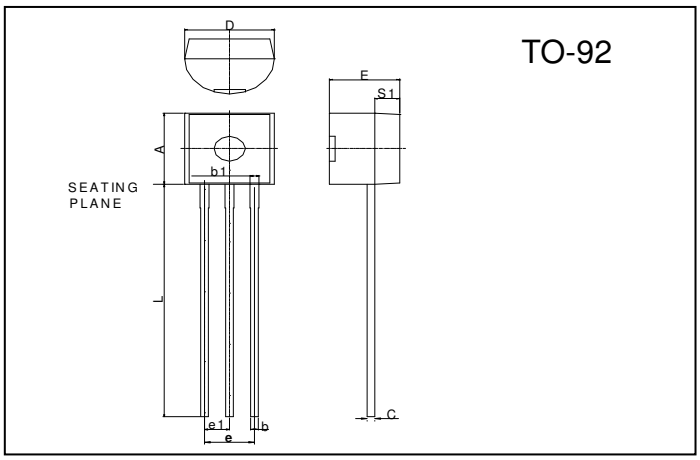
## Description

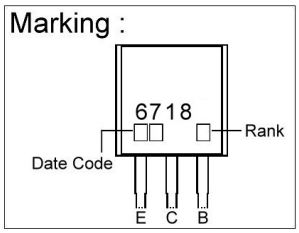
The G6718 is designed for general purpose medium power amplifier and switching applications.

## Features

- High Power: 850mW
- High Current: 1A

## Package Dimensions




| REF. | Millimeter | | REF. | Millimeter | |
|---|---|---|---|---|---|
| | Min. | Max. | | Min. | Max. |
| A | 4.45 | 4.7 | D | 4.44 | 4.7 |
| $S_1$ | 1.02 | - | E | 3.30 | 3.81 |
| b | 0.36 | 0.51 | L | 12.70 | - |
| $b_1$ | 0.36 | 0.76 | e1 | 1.150 | 1.390 |
| C | 0.36 | 0.51 | e | 2.42 | 2.66 |

## Absolute Maximum Ratings ($T_A$=25℃)

| Parameter | Symbol | Ratings | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | 100 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | 100 | V |
| Emitter to Base Voltage | $V_{EBO}$ | 5 | V |
| Collector Current (DC) | $I_C$ | 1 | A |
| Collector Current (Pulse) | $I_C$ | 2 | A |
| Base Current | $I_B$ | 200 | mA |
| Total Device Dissipation | $P_D$ | 850 | mW |
| Junction Temperature | $T_J$ | 150 | ℃ |
| Storage Temperature | $T_{stg}$ | -55 ~ +150 | ℃ |

## Electrical Characteristics ($T_A$ = 25℃ unless otherwise noted)

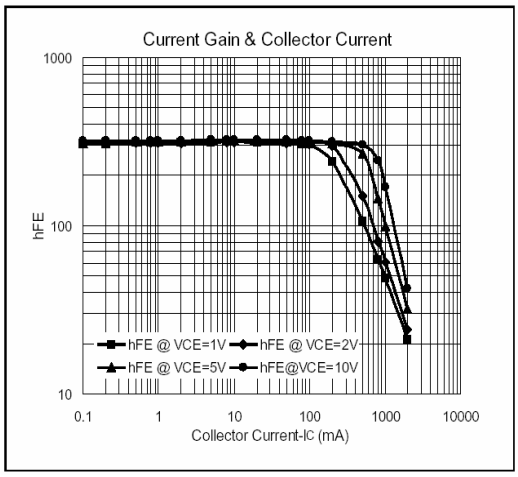
| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|---|---|---|---|---|---|
| $BV_{CBO}$ | 100 | - | - | V | $I_C$=100uA, $I_E$=0 |
| $BV_{CEO}$ | 100 | - | - | V | $I_C$=1mA, $I_B$=0 |
| $BV_{EBO}$ | 5 | - | - | V | $I_E$=10uA, $I_C$=0 |
| $I_{CBO}$ | - | - | 100 | nA | $V_{CB}$=80V, $I_E$=0 |
| *$V_{CE(sat)}$ | - | - | 350 | mV | $I_C$=350mA, $I_B$=35mA |
| *$h_{FE}$1 | 80 | - | - | | $V_{CE}$=1V, $I_C$=50mA |
| *$h_{FE}$2 | 50 | - | 300 | | $V_{CE}$=1V, $I_C$=250mA |
| *$h_{FE}$3 | 20 | - | - | | $V_{CE}$=1V, $I_C$=500mA |
| fT | 50 | - | - | MHz | $V_{CE}$=10V, $I_E$=50mA, f=100MHz |
| Cob | - | - | 20 | pF | $V_{CB}$=10V, $I_E$=0, f=1MHz |

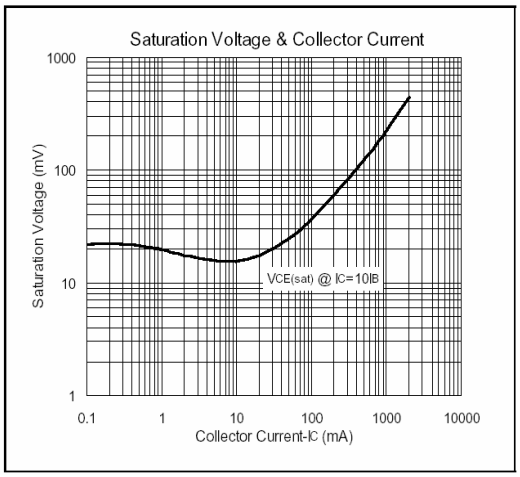
***Pulse Test: Pulse Width≦380μs, Duty Cycle≦2%**

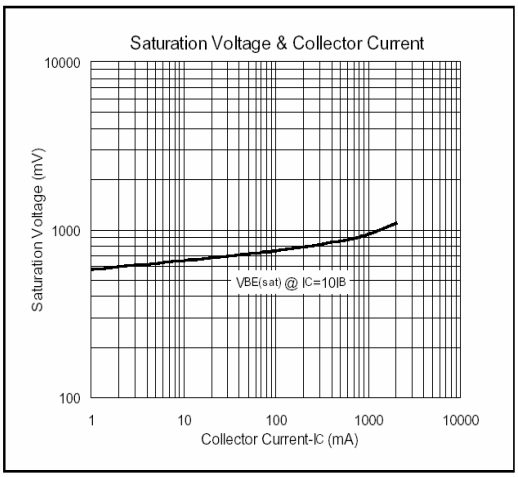
## Classification Of $h_{FE}$2

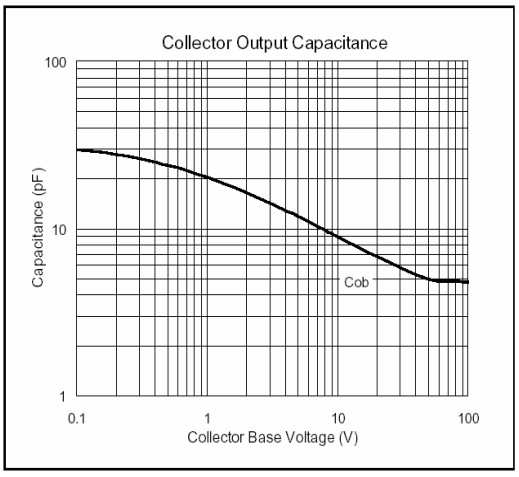
| Rank | A | B |
|---|---|---|
| Range | 50 ~ 115 | 95 ~ 300 |

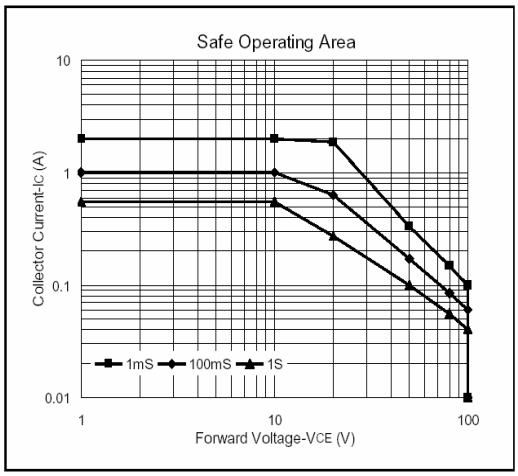
## Characteristics Curve

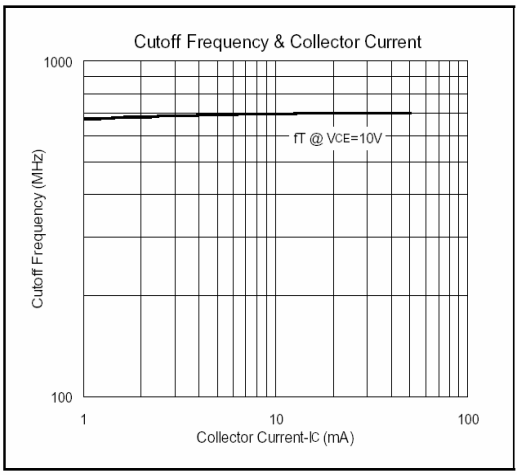


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