

## 2SC1627A TRANSISTOR (NPN)

### FEATURE

Power dissipation

$P_{CM}$ : 0.8 W ( $T_{amb}=25^{\circ}C$ )

Collector current

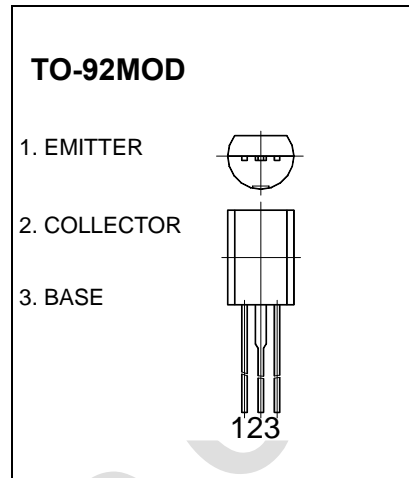
$I_{CM}$ : 0.4 A

Collector-base voltage

$V_{(BR)CBO}$ : 80 V

Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$



### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$ unless otherwise specified)

| Parameter                            | Symbol        | Test conditions        | MIN  | MAX | UNIT    |
|--------------------------------------|---------------|------------------------|------|-----|---------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C=100\mu A, I_E=0$  | 80   |     | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C=5mA, I_B=0$       | 80   |     | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E=100\mu A, I_C=0$  | 5    |     | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB}=50V, I_E=0$    |      | 0.1 | $\mu A$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB}=5V, I_C=0$     |      | 0.1 | $\mu A$ |
| DC current gain                      | $h_{FE(1)}$   | $V_{CE}=2V, I_C=50mA$  | 70   | 240 |         |
|                                      | $h_{FE(2)}$   | $V_{CE}=2V, I_C=200mA$ | 40   |     |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=200mA, I_B=20mA$  |      | 0.4 | V       |
| Base-emitter voltage                 | $V_{BE(on)}$  | $V_{CE}=2V, I_C=5mA$   | 0.55 | 0.8 | V       |
| Transition frequency                 | $f_T$         | $V_{CE}=10V, I_C=10mA$ | 80   |     | MHz     |

### CLASSIFICATION OF $h_{FE(1)}$

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