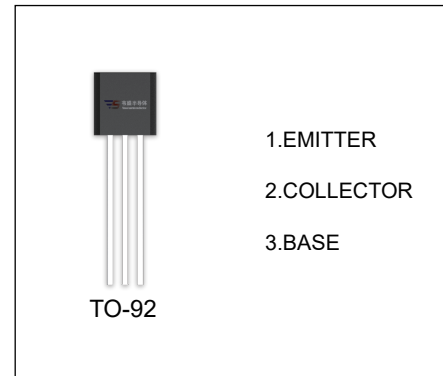


## 2SA673A TRANSISTOR (PNP)

### FEATURES

- Low Frequency Amplifier
- Complementary Pair with 2SC1213A



### ORDERING INFORMATION

| Part Number | Package | Packing Method | Pack Quantity |
|-------------|---------|----------------|---------------|
| 2SA673A     | TO-92   | Bulk           | 1000pcs/Bag   |
| 2SA673A-TA  | TO-92   | Tape           | 2000pcs/Box   |

### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

| Symbol          | Parameter                                        | Value    | Unit                          |
|-----------------|--------------------------------------------------|----------|-------------------------------|
| $V_{CBO}$       | Collector-Base Voltage                           | -50      | V                             |
| $V_{CEO}$       | Collector-Emitter Voltage                        | -50      | V                             |
| $V_{EBO}$       | Emitter-Base Voltage                             | -4       | V                             |
| $I_C$           | Collector Current -Continuous                    | -0.5     | A                             |
| $P_D$           | Collector Power Dissipation                      | 400      | mW                            |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient      | 312      | $^{\circ}\text{C} / \text{W}$ |
| $T_J, T_{stg}$  | Operation Junction and Storage Temperature Range | -55~+150 | $^{\circ}\text{C}$            |

$T_a=25^\circ\text{C}$  unless otherwise specified

| Parameter                            | Symbol          | Test conditions                        | Min | Typ | Max   | Unit          |
|--------------------------------------|-----------------|----------------------------------------|-----|-----|-------|---------------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$   | $I_C=-0.01\text{mA}, I_E=0$            | -50 |     |       | V             |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$   | $I_C=-1\text{mA}, I_B=0$               | -50 |     |       | V             |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$   | $I_E=-0.01\text{mA}, I_C=0$            | -4  |     |       | V             |
| Collector cut-off current            | $I_{CBO}$       | $V_{CB}=-20\text{V}, I_E=0$            |     |     | -0.5  | $\mu\text{A}$ |
| Emitter cut-off current              | $I_{EBO}$       | $V_{EB}=-3\text{V}, I_C=0$             |     |     | -0.5  | $\mu\text{A}$ |
| DC current gain                      | $h_{FE(1)}$     | $V_{CE}=-3\text{V}, I_C=-10\text{mA}$  | 60  |     | 320   |               |
|                                      | $h_{FE(2)}^*$   | $V_{CE}=-3\text{V}, I_C=-500\text{mA}$ | 10  |     |       |               |
| Collector-emitter saturation voltage | $V_{CE(sat)}^*$ | $I_C=-150\text{mA}, I_B=-15\text{mA}$  |     |     | -0.6  | V             |
| Base-emitter voltage                 | $V_{BE}$        | $V_{CE}=-3\text{V}, I_C=-10\text{mA}$  |     |     | -0.75 | V             |

\*Pulse test: pulse width  $\leq 300\mu\text{s}$ , duty cycles  $\leq 2.0\%$ .

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

| RANK  | B      | C       | D       |
|-------|--------|---------|---------|
| RANGE | 60-120 | 100-200 | 160-320 |