

### A773 TRANSISTOR (PNP)

#### FEATURES

Power dissipation

$$P_{CM}: 0.25 \text{ W (Tamb=25°C)}$$

Collector current

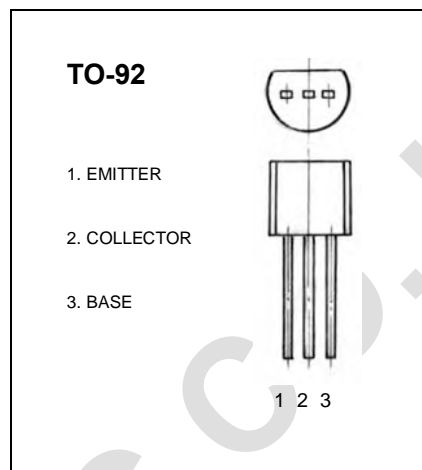
$$I_{CM}: -0.1 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -60 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55°C \text{ to } +150°C$$



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

| Parameter                            | Symbol        | Test conditions  | MIN   | TYP   | MAX   | UNIT    |
|--------------------------------------|---------------|--|-------|-------|-------|---------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C = -50\mu A, I_E = 0$                                | -60   |       |       | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C = -1mA, I_B = 0$                                    | -50   |       |       | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E = -50\mu A, I_C = 0$                                | -5    |       |       | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB} = -60V, I_E = 0$                                 |       |       | -0.1  | $\mu A$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB} = -5V, I_C = 0$                                  |       |       | -0.1  | $\mu A$ |
| DC current gain                      | $h_{FE}$      | $V_{CE} = -6V, I_C = -1mA$                               | 90    | 200   | 600   |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -100mA, I_B = -10mA$                              |       | -0.18 | -0.3  | V       |
| Base-emitter voltage                 | $V_{BE}$      | $V_{CE} = -6V, I_C = -1.0mA$                             | -0.58 | -0.62 | -0.68 | V       |
| Transition frequency                 | $f_T$         | $V_{CE} = -6V, I_C = -10mA$                              | 100   | 180   |       | MHz     |
| Collector output capacitance         | $C_{ob}$      | $V_{CB} = -10V, I_E = 0, f = 1MHz$                       |       | 4.5   | 6     | pF      |
| Noise figure                         | NF            | $V_{CE} = -6V, I_C = -0.3mA, R_g = 10k\Omega, f = 100Hz$ |       | 6     | 20    | dB      |

#### CLASSIFICATION OF $h_{FE}$

| Rank  | R      | Q       | P       | K       |
|-------|--------|---------|---------|---------|
| Range | 90-180 | 135-270 | 200-400 | 300-600 |