

## Plastic-Encapsulate Transistors

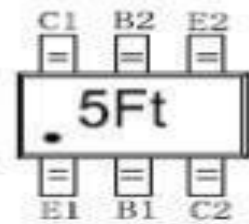
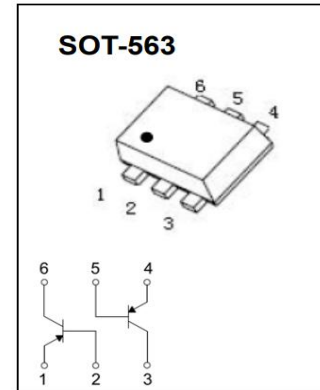
DUAL TRANSISTOR (PNP+PNP)

### FEATURES

- Two transistors in one package
- Reduces number of components and board space
- No mutual interference between the transistors

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

| symbol          | Parameter  | Value    |
|-----------------|--|----------|
| $V_{CB0}$       | Collector- Base Voltage                          | -80      |
| $V_{CE0}$       | Collector-Emitter Voltage                        | -65      |
| $V_{EB0}$       | Emitter-Base Voltage                             | -5       |
| $I_c$           | Collector Current -Continuous                    | -0.1     |
| $P_c$           | Collector Power Dissipation                      | 0.2      |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient      | 625      |
| $T_J, T_{STG}$  | Operation Junction and Storage Temperature Range | -55~+150 |



**ELECTRICAL CHARACTERISTICS**( $T_a= 25^{\circ}\text{C}$  unless otherwise specified)

| Parameter                            | symbol        | Test conditions  | Min | Typ | Max  | Unit |
|--------------------------------------|---------------|--|-----|-----|------|------|
| Collector.base breakdown voltage     | $V_{(BR)CBO}$ | $I_c=-10\mu\text{A}, I_E=0$                            | -80 |     |      | V    |
| Collector.emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_c=-10\text{mA}, I_B=0$                              | -65 |     |      | V    |
| Emitter.base breakdown voltage       | $V_{(BR)EBO}$ | $I_E=-10\mu\text{A}, I_c=0$                            | -5  |     |      | V    |
| Collector cut.off current            | $I_{CBO}$     | $V_{CB}=-30\text{V}, I_E=0$                            |     |     | -15  | nA   |
| Emitter cut.off current              | $I_{EBO}$     | $V_{EB}=-5\text{V}, I_c=0$                             |     |     | -100 | nA   |
| DC current gain                      | $h_{FE}$      | $V_{CE}=-5\text{V}, I_c=-2\text{mA}$                   | 200 |     | 450  |      |
| Collector.emitter saturation voltage | $V_{CE(sat)}$ | $I_c=-10\text{mA}, I_B=-0.5\text{mA}$                  |     |     | -0.1 | V    |
|                                      |               | $I_c=-100\text{mA}, I_B=-5\text{mA}^*$                 |     |     | -0.3 | V    |
| Base.emitter saturation voltage      | $V_{BE(sat)}$ | $I_c=-10\text{mA}, I_B=-0.5\text{mA}$                  |     | 0.7 |      | V    |
| output Capacitance                   | $C_{ob0}$     | $V_{CB}=-10\text{V}, f=1\text{MHz}, I_E=0$             |     |     | 2.5  | pF   |
| Current Gain.Bandwidth Product       | $f_T$         | $V_{CE}=-5\text{V}, I_c=-10\text{mA}, f=100\text{MHz}$ | 100 |     |      | MHz  |

### Typical Characteristics

