# KXT5551 (CXT5551)

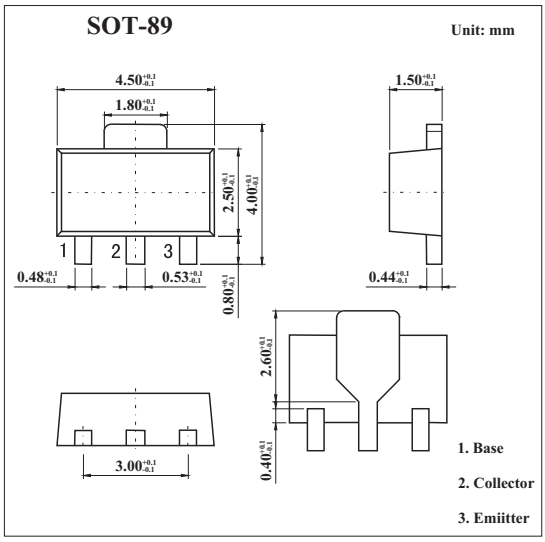
## SOT-89 Plastic-Encapsulate Transistors

### Features

- High current (max. 500mA).
- Low voltage (max. 150 V).
- Surface Mount NPN Silicon Transistor

### MECHANICAL DATA

- Case style:SOT-89 molded plastic
- Mounting position:any




## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector-base voltage | $V_{CBO}$ | 180 | V |
| Collector-emitter voltage | $V_{CEO}$ | 160 | V |
| Emitter-base voltage | $V_{EBO}$ | 6 | V |
| Collector current (DC) | $I_C$ | 600 | mA |
| power dissipation | $P_D$ | 1.2 | W |
| thermal resistance Junction-to-ambient | $R_{\theta JA}$ | 104 | ℃/W |
| Junction temperature | $T_j$ | 150 | ℃ |
| Storage temperature | $T_{stg}$ | -65 to +150 | ℃ |

**PACKAGE INFORMATION**

| Device | Package | Shipping |
|---|---|---|
| KXT5551 (CXT5551) | SOT-89 | 1000/Tape&Reel |

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector to base breakdown voltage | $V_{CBO}$ | $I_C$=100 μ A | 180 | | | V |
| Collector to emitter breakdown voltage | $V_{CEO}$ | $I_C$=1.0mA | 160 | | | V |
| Emitter to base breakdown voltage | $V_{EBO}$ | $I_E$=10 μ A | 6.0 | | | V |
| Collector cutoff current | $I_{CBO}$ | $V_{CB}$ = 120 V, $I_E$ = 0 | | | 50 | nA |
| | | $V_{CB}$ = 120 V, $T_A$=100℃ | | | 50 | μ A |
| DC current gain | $h_{FE}$ | $I_C$ = 1.0 mA; $V_{CE}$ = 5.0 V | 80 | | | |
| | | $I_C$ = 10mA; $V_{CE}$ = 5.0V | 80 | | 250 | |
| | | $I_C$ = 50 mA; $V_{CE}$ = 5.0V | 30 | | | |
| Collector to emitter saturation voltage | $V_{CE(sat)}$ | $I_C$ = 10 mA; $I_B$ = 1.0mA | | | 0.15 | V |
| | | $I_C$ = 50 mA; $I_B$ = 5.0mA | | | 0.20 | V |
| Base to emitter saturation voltage | $V_{BE(sat)}$ | $I_C$ = 10 mA; $I_B$ = 1.0mA | | | 1.00 | V |
| | | $I_C$ = 50 mA; $I_B$ = 5.0mA | | | 1.00 | V |
| Output capacitance | $C_{ob}$ | $V_{CB}$ = 10 V, $I_E$ = 0,f=1.0MHz | | | 6.0 | pF |
| Transition frequency | $f_T$ | $I_C$ = 10 mA; $V_{CE}$ =10V; f = 100 MHz | 100 | | 300 | MHz |

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| Marking | 1G6 |
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