Elektronische Bauelemente

# 2SC554

**2A, 100V**

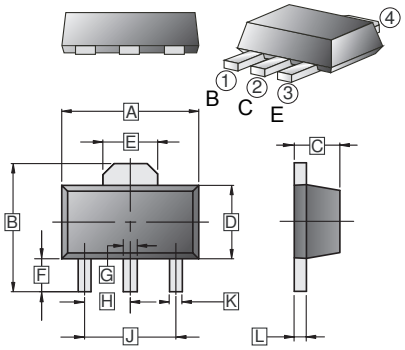
**NPN Plastic Encapsulated Transistor**

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low Saturation Voltage
- High Speed Switching

**SOT-89**




## MARKING

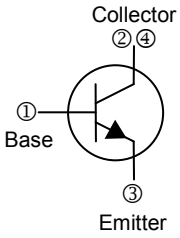
**C554**

## PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---|---|---|
| SOT-89 | 1K | 7 inch |

## ORDER INFORMATION

| Part Number | Type |
|---|---|
| 2SC554 | Lead (Pb)-free |
| 2SC554-C | Lead (Pb)-free and Halogen-free |




| REF. | Millimeter Min. | Millimeter Max. | REF. | Millimeter Min. | Millimeter Max. |
|---|---|---|---|---|---|
| A | 4.40 | 4.60 | G | 0.40 | 0.58 |
| B | 3.94 | 4.25 | H | 1.50 TYP | |
| C | 1.40 | 1.60 | J | 3.00 TYP | |
| D | 2.25 | 2.60 | K | 0.32 | 0.52 |
| E | 1.55 TYP. | | L | 0.35 | 0.44 |
| F | 0.89 | 1.20 | | | |

## ABSOLUTE MAXIMUM RATINGS ($T_A$=25°C unless otherwise specified)

| Parameter | Symbol | Ratings | Unit |
|---|---|---|---|
| Collector-Base Voltage | $V_{CBO}$ | 100 | V |
| Collector-Emitter Voltage | $V_{CEO}$ | 100 | V |
| Emitter-Base Voltage | $V_{EBO}$ | 6 | V |
| Collector Current-Continuous | $I_C$ | 2 | A |
| Collector Power Dissipation | $P_C$ | 500 | mW |
| Thermal Resistance From Junction-Ambient | $R_{\theta JA}$ | 250 | °C/W |
| Junction & Storage Temperature | $T_J$, $T_{STG}$ | 150, -55~150 | °C |

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

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test conditions |
|---|---|---|---|---|---|---|
| Collector-Base Breakdown Voltage | $V_{(BR)CBO}$ | 100 | - | - | V | $I_C$=0.1mA, $I_E$=0 |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | 100 | - | - | V | $I_C$=1mA, $I_B$=0 |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | 6 | - | - | V | $I_E$=0.1mA, $I_C$=0 |
| Collector Cut-off Current | $I_{CBO}$ | - | - | 1 | μA | $V_{CB}$=100V, $I_E$=0 |
| Emitter Cut-off Current | $I_{EBO}$ | - | - | 1 | μA | $V_{EB}$=4V, $I_C$=0 |
| DC Current Gain | $h_{FE}$ | 82 | - | 270 | | $V_{CE}$=3V, $I_C$=100mA |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | - | - | 0.2 | V | $I_C$=500mA, $I_B$=25mA |
| | | - | - | 0.3 | | $I_C$=1A, $I_B$=50mA |
| Transition Frequency | $f_T$ | 30 | - | - | MHz | $V_{CE}$=5V, $I_C$=100mA |
| Collector Output Capacitance | $C_{ob}$ | - | 16 | - | pF | $V_{CB}$=10V, $I_E$=0, f=1MHz |

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## CHARACTERISTIC CURVES

