

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

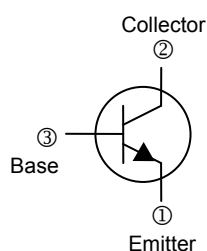
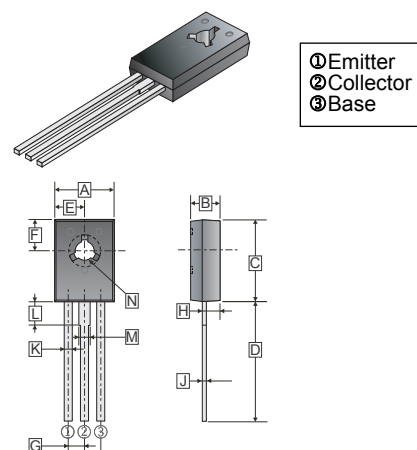
## FEATURES

- Low frequency power amplifier

TO-18

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

| Product-Rank | 2SC1162-B | 2SC1162-C | 2SC1162-D |
|--------------|-----------|-----------|-----------|
| Range        | 60~120    | 100~200   | 160~320   |



| REF. | Millimeter |       | REF. | Millimeter |      |
|------|------------|-------|------|------------|------|
|      | Min.       | Max.  |      | Min.       | Max. |
| A    | 7.40       | 7.80  | H    | 1.10       | 1.50 |
| B    | 2.50       | 2.90  | J    | 0.45       | 0.60 |
| C    | 10.60      | 11.00 | K    | 0.66       | 0.86 |
| D    | 15.30      | 15.70 | L    | 2.10       | 2.30 |
| E    | 3.70       | 3.90  | M    | 1.17       | 1.37 |
| F    | 3.90       | 4.10  | N    | 3.00       | 3.20 |
| G    | 2.29 TYP.  |       |      |            |      |

## ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

| Parameter                      | Symbol         | Rating       | Unit             |
|--------------------------------|----------------|--------------|------------------|
| Collector to Base Voltage      | $V_{CBO}$      | 35           | V                |
| Collector to Emitter Voltage   | $V_{CEO}$      | 35           | V                |
| Emitter to Base Voltage        | $V_{EBO}$      | 5            | V                |
| Collector Current - Continuous | $I_C$          | 2.5          | A                |
| Collector Power Dissipation    | $P_C$          | 750          | mW               |
| Junction, Storage Temperature  | $T_J, T_{STG}$ | 150, -55~150 | $^\circ\text{C}$ |

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

| Parameter                               | Symbol        | Min. | Typ. | Max. | Unit          | Test Conditions                       |
|-----------------------------------------|---------------|------|------|------|---------------|---------------------------------------|
| Collector to Base Breakdown Voltage     | $V_{(BR)CBO}$ | 35   | -    | -    | V             | $I_C=1\text{mA}, I_E=0$               |
| Collector to Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | 35   | -    | -    | V             | $I_C=10\text{mA}, I_B=0$              |
| Emitter to Base Breakdown Voltage       | $V_{(BR)EBO}$ | 5    | -    | -    | V             | $I_E=1\text{mA}, I_C=0$               |
| Collector Cut - Off Current             | $I_{CBO}$     | -    | -    | 20   | $\mu\text{A}$ | $V_{CB}=35\text{V}, I_E=0$            |
| Emitter Cut - Off Current               | $I_{EBO}$     | -    | -    | 20   | $\mu\text{A}$ | $V_{EB}=5\text{V}, I_C=0$             |
| DC Current Gain                         | $h_{FE(1)}$   | 60   | -    | 320  |               | $V_{CE}=2\text{V}, I_C=0.5\text{A}$   |
|                                         | $h_{FE(2)}$   | 20   | -    | -    |               | $V_{CE}=2\text{V}, I_C=1.5\text{A}^*$ |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | -    | -    | 1    | V             | $I_C=2\text{A}, I_B=200\text{mA}$     |
| Transition Frequency                    | $f_T$         | -    | 180  | -    | MHz           | $V_{CE}=2\text{V}, I_C=200\text{mA}$  |
| Collector Output Capacitance            | $V_{BE}$      | -    | -    | 1.5  | V             | $V_{CE}=2\text{V}, I_C=1.5\text{A}$   |

\*Pulse test

## CHARACTERISTIC CURVE

