

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC3423

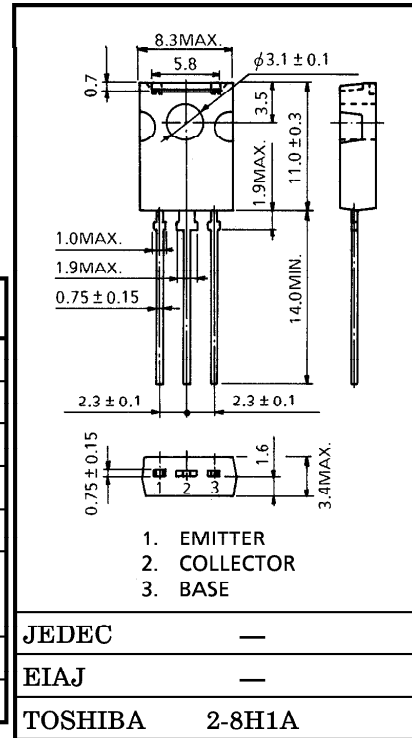
AUDIO FREQUENCY AMPLIFIER APPLICATIONS.

Unit in mm

- Complementary to 2SA1360
- Small Collector Output Capacitance : $C_{ob}=1.8\text{pF}$ (Typ.)
- High Transition Frequency : $f_T=200\text{MHz}$ (Typ.)

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|-----------------------------|--------------------------|-----------|---------|------------------|
| Collector-Base Voltage | | V_{CBO} | 150 | V |
| Collector-Emitter Voltage | | V_{CEO} | 150 | V |
| Emitter-Base Voltage | | V_{EBO} | 5 | V |
| Collector Current | | I_C | 50 | mA |
| Base Current | | I_B | 5 | mA |
| Collector Power Dissipation | $T_a = 25^\circ\text{C}$ | P_C | 1.2 | W |
| | $T_c = 25^\circ\text{C}$ | | 5 | |
| Junction Temperature | | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | | T_{stg} | -55~150 | $^\circ\text{C}$ |



Weight : 0.82g

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|---|------|------|------|---------------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=150\text{V}, I_E=0$ | — | — | 0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5\text{V}, I_C=0$ | — | — | 0.1 | μA |
| DC Current Gain | h_{FE} (Note) | $V_{CE}=5\text{V}, I_C=10\text{mA}$ | 80 | — | 240 | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=10\text{mA}, I_B=1\text{mA}$ | — | — | 1.0 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE}=5\text{V}, I_C=10\text{mA}$ | — | — | 0.8 | V |
| Transition Frequency | f_T | $V_{CE}=5\text{V}, I_C=10\text{mA}$ | — | 200 | — | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$ | — | 1.8 | — | pF |

Note : h_{FE} Classification O : 80~160, Y : 120~240

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