

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07319 DT-33-19

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

# 2SA1329

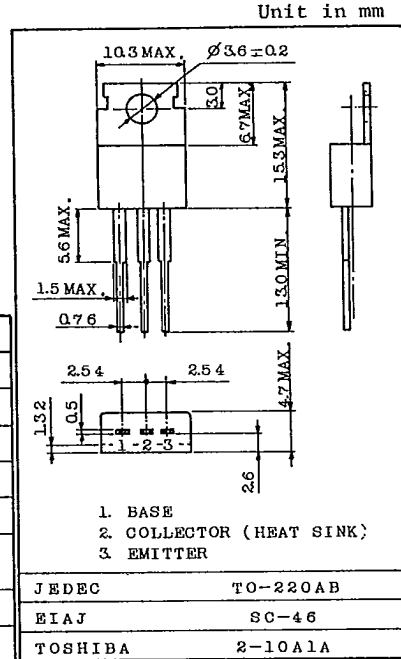
HIGH CURRENT SWITCHING APPLICATIONS.

FEATURES:

- Low Collector Saturation Voltage  
:  $V_{CE(sat)} = -0.4V(\text{Max.})$  at  $I_C = -6A$
- High Speed Switching Time :  $t_{stg} = 1.0\mu s(\text{Typ.})$
- Complementary to 2SC3346

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

| CHARACTERISTIC  | SYMBOL    | RATING    | UNIT       |
|---|-----------|-----------|------------|
| Collector-Base Voltage                                | $V_{CBO}$ | -80       | V          |
| Collector-Emitter Voltage                             | $V_{CEO}$ | -80       | V          |
| Emitter-Base Voltage                                  | $V_{EBO}$ | -6        | V          |
| Collector Current                                     | $I_C$     | -12       | A          |
| Base Current  | $I_B$     | -2        | A          |
| Collector Power Dissipation<br>( $T_c = 25^\circ C$ ) | $P_C$     | 40        | W          |
| Junction Temperature                                  | $T_j$     | 150       | $^\circ C$ |
| Storage Temperature Range                             | $T_{stg}$ | -55 ~ 150 | $^\circ C$ |



Mounting Kit No. AC75  
Weight : 1.9g

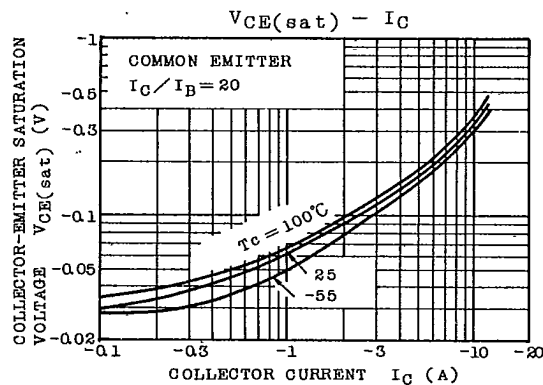
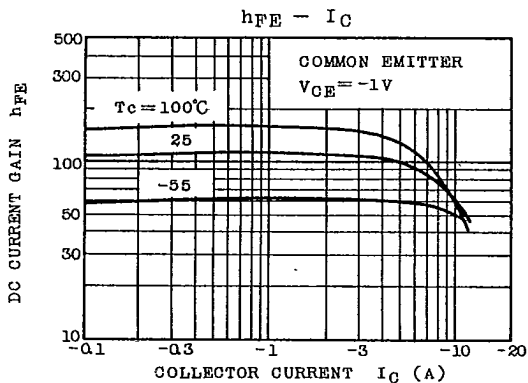
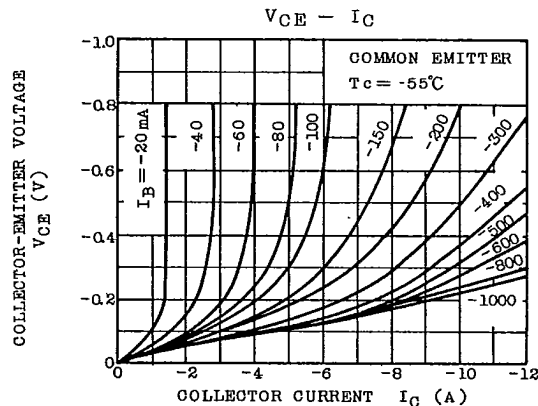
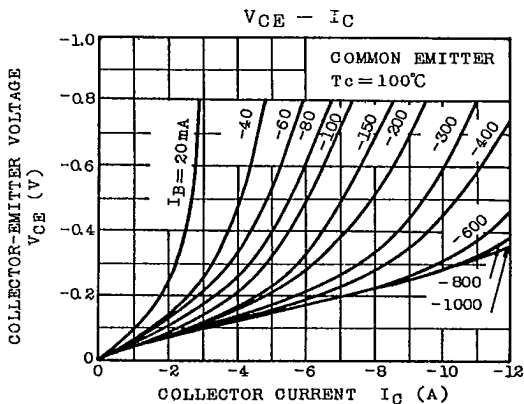
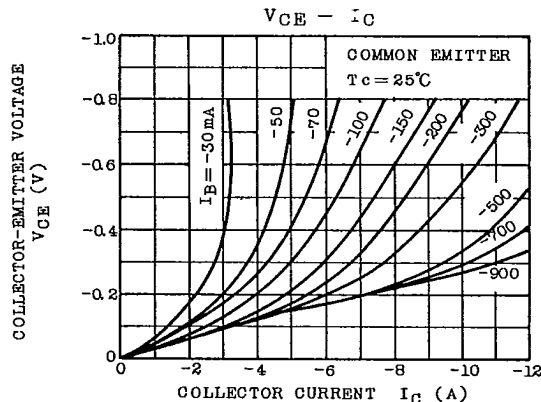
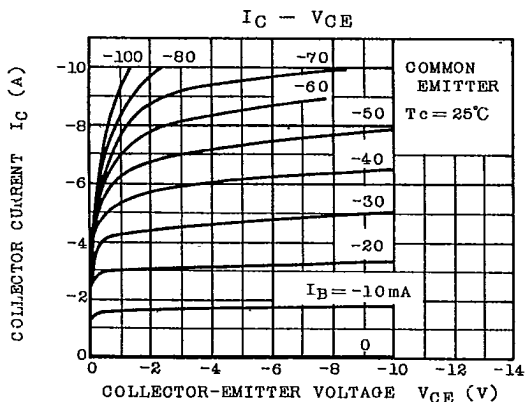
ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

| CHARACTERISTIC                      |                   | SYMBOL                | TEST CONDITION                     | MIN. | TYP. | MAX. | UNIT    |
|-------------------------------------|-------------------|-----------------------|------------------------------------|------|------|------|---------|
| Collector Cut-off Current           |                   | $I_{CBO}$             | $V_{CB} = -80V, I_E = 0$           | -    | -    | -10  | $\mu A$ |
| Emitter Cut-off Current             |                   | $I_{EBO}$             | $V_{EB} = -6V, I_C = 0$            | -    | -    | -10  | $\mu A$ |
| Collector-Emitter Breakdown Voltage |                   | $V_{(BR)CEO}$         | $I_C = -50mA, I_B = 0$             | -80  | -    | -    | V       |
| DC Current Gain                     |                   | $h_{FE(1)}$<br>(Note) | $V_{CE} = -1V, I_C = -1A$          | 70   | -    | 240  |         |
|                                     |                   | $h_{FE(2)}$           | $V_{CE} = -1V, I_C = -6A$          | 40   | -    | -    |         |
| Saturation Voltage                  | Collector-Emitter | $V_{CE(sat)}$         | $I_C = -6A, I_B = -0.3A$           | -    | -0.2 | -0.4 | V       |
|                                     | Base-Emitter      | $V_{BE(sat)}$         | $I_C = -6A, I_B = -0.3A$           | -    | -0.9 | -1.2 |         |
| Transition Frequency                |                   | $f_T$                 | $V_{CE} = -5V, I_C = -1A$          | -    | 50   | -    | MHz     |
| Collector Output Capacitance        |                   | $C_{ob}$              | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | -    | 400  | -    | pF      |
| Switching Time                      | Turn-on Time      | $t_{on}$              |                                    | -    | 0.3  | -    | $\mu s$ |
|                                     | Storage Time      | $t_{stg}$             |                                    | -    | 1.0  | -    |         |
|                                     | Fall Time         | $t_f$                 |                                    | -    | 0.5  | -    |         |

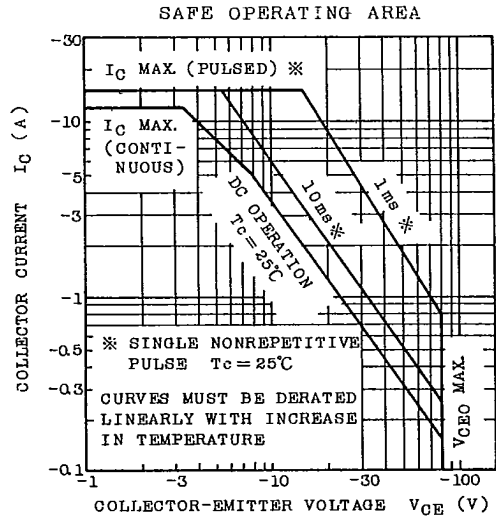
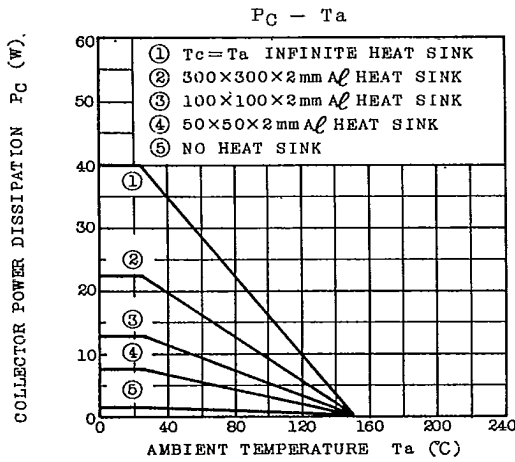
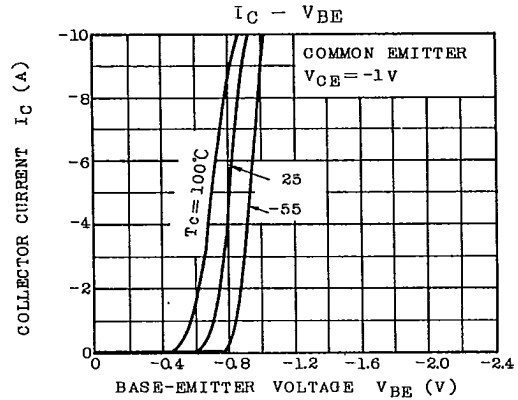
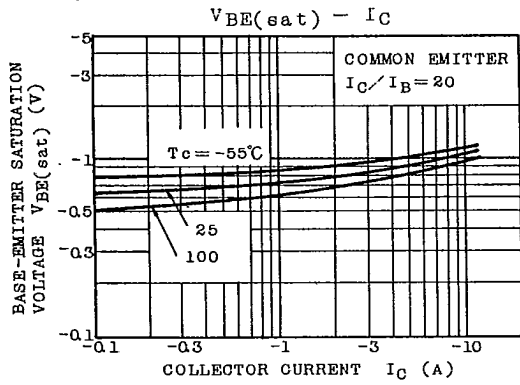
Note :  $h_{FE(1)}$  Classification O : 70 ~ 140, Y : 120 ~ 240

TOSHIBA CORPORATION

**2SA1329**



TOSHIBA CORPORATION



TOSHIBA CORPORATION

This datasheet has been downloaded from:

[www.DatasheetCatalog.com](http://www.DatasheetCatalog.com)

Datasheets for electronic components.