

9097250 TOSHIBA (DISCRETE/OPTO)

56C 7559 DT-33-09

2SC2562

SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

HIGH CURRENT SWITCHING APPLICATIONS.

FEATURES:

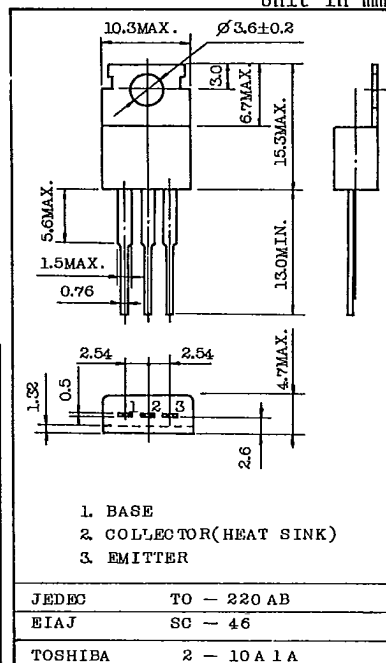
- Low Collector Saturation Voltage :
 $V_{CE(sat)}=0.4V$ (Max.) (at $I_C=3A$)
- High Speed Switching Time : $t_{stg}=1.0\mu s$ (Typ.)
- Complementary to 2SA1012.

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

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|-----------|---------|------------|
| Collector-Base Voltage | V_{CBO} | 60 | V |
| Collector-Emitter Voltage | V_{CEO} | 50 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 5 | A |
| Collector Power Dissipation ($T_c=25^\circ C$) | P_C | 25 | W |
| Junction Temperature | T_j | 150 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | -55~150 | $^\circ C$ |

INDUSTRIAL APPLICATIONS

Unit in mm

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

Mounting Kit No. AC75

Weight : 1.9g

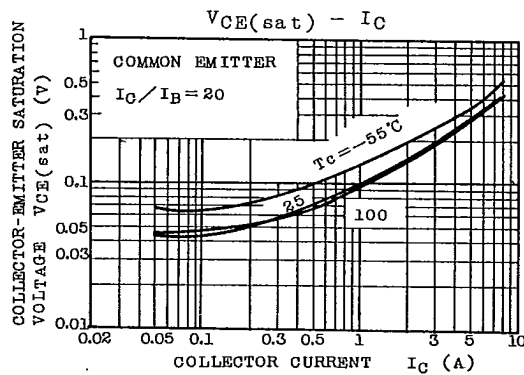
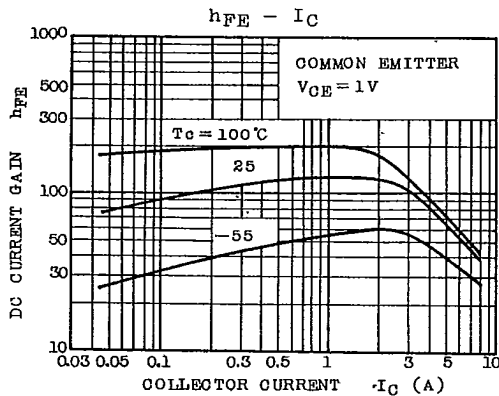
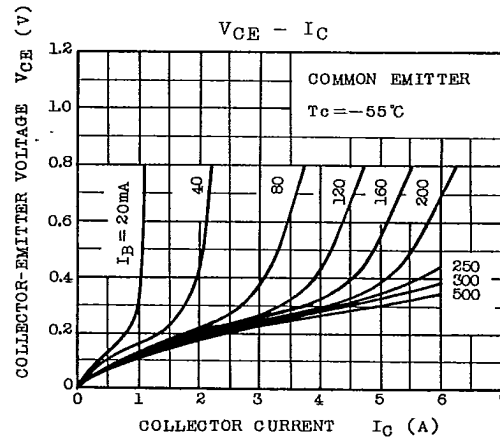
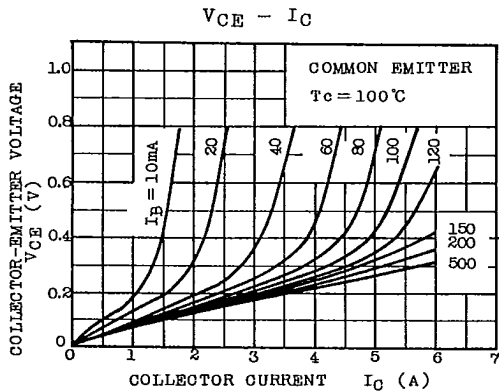
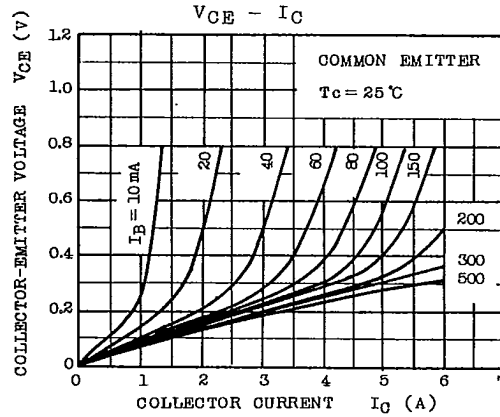
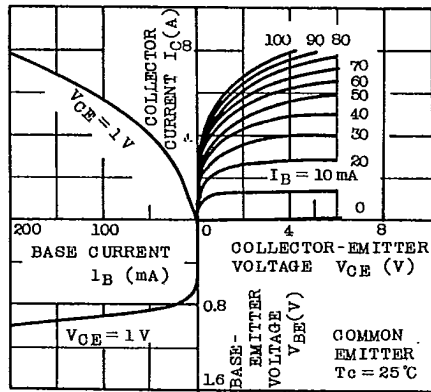
| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------------------------|-------------------|-----------------------|---|------|------|------|---------|
| Collector Cut-off Current | | I_{CBO} | $V_{CB}=50V, I_E=0$ | - | - | 1 | μA |
| Emitter Cut-off Current | | I_{EBO} | $V_{EB}=5V, I_C=0$ | - | - | 1 | μA |
| Collector-Emitter Breakdown Voltage | | $V_{(BR)CEO}$ | $I_C=10mA, I_B=0$ | 50 | - | - | V |
| DC Current Gain | | $h_{FE(1)}$ (Note) | $V_{CE}=1V, I_C=1A$ | 70 | - | 240 | |
| | | $h_{FE(2)}$ | $V_{CE}=1V, I_C=3A$ | 30 | - | - | |
| Saturation Voltage | Collector-Emitter | $V_{CE(sat)}$ | $I_C=3A, I_B=0.15A$ | - | 0.2 | 0.4 | V |
| | Base-Emitter | $V_{BE(sat)}$ | $I_C=3A, I_B=0.15A$ | - | 0.9 | 1.2 | |
| Transition Frequency | | f_T | $V_{CE}=4V, I_C=1A$ | - | 120 | - | MHz |
| Collector Output Capacitance | | C_{ob} | $V_{CB}=10V, I_E=0, f=1MHz$ | - | 80 | - | pF |
| Switching Time | Turn-on Time | t_{on} | $I_{B1} = -I_{B2} = 0.15A$ DUTY CYCLE $\leq 1\%$ $V_{CC} = 30V$ | - | 0.1 | - | μs |
| | Storage Time | t_{stg} | | - | 1.0 | - | |
| | Fall Time | t_f | | - | 0.1 | - | |

Note : $h_{FE(1)}$ Classification 0 : 70~140, Y : 120~240

TOSHIBA CORPORATION

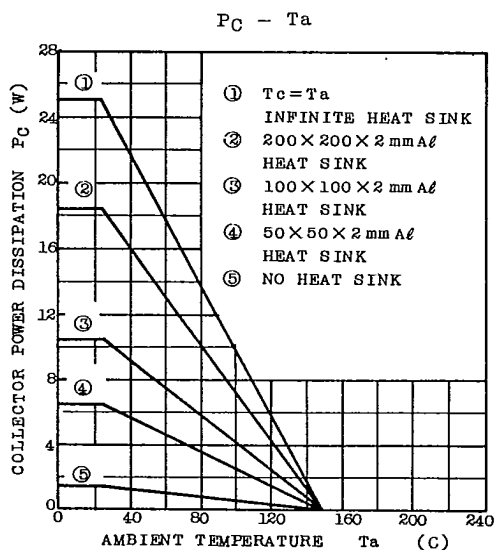
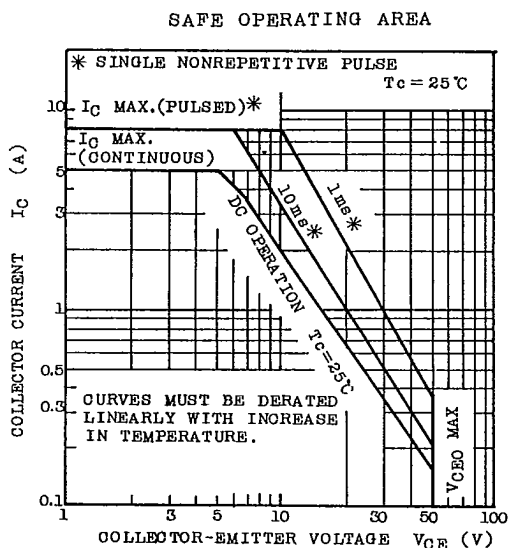
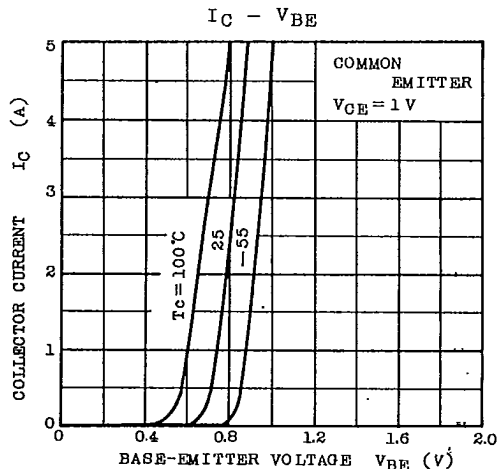
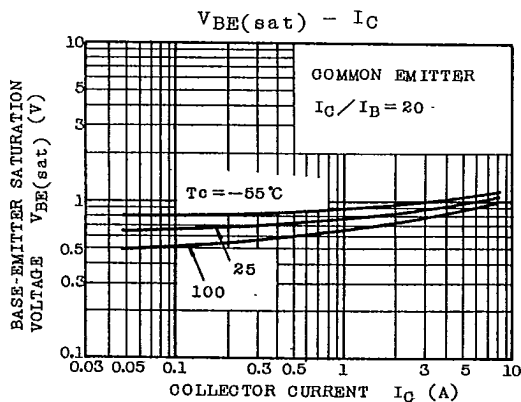
2SC2562

STATIC CHARACTERISTICS



TOSHIBA CORPORATION

2SC2562



TOSHIBA CORPORATION