

2SA1363

FOR HIGH CURRENT DRIVE APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

2SA1363 is a silicon PNP epitaxial type transistor designed with high collector current and high collector dissipation.

Complementary with 2SC3443.

FEATURE

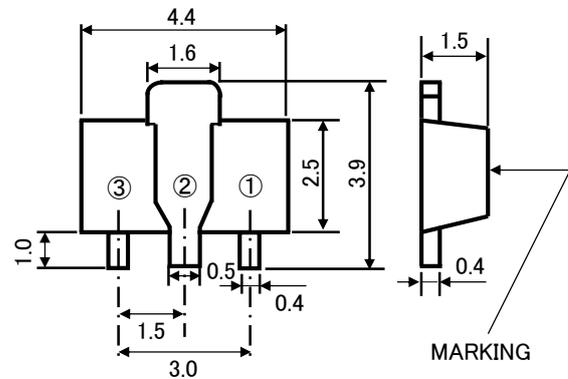
- High h_{FE} $h_{FE}=150\sim 800$
- High collector current $I_C=-2A$
- Small collector to emitter saturation voltage
 $V_{CE(sat)}=-0.17V$ type (@ $I_C=-1A/I_B=-50mA$)
- High collector dissipation $P_C=500mW$
- Small package for easy mounting

APPLICATION

Small type motor drive for VTR, deck, player, power supply

OUTLINE DRAWING

UNIT:mm



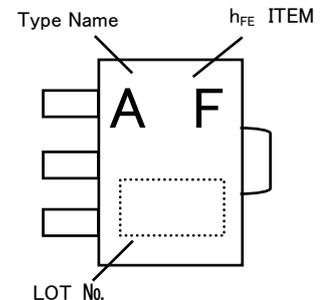
TERMINAL CONNECTOR

- ①: BASE JEITA: SC-62
- ②: COLLECTOR JEDEC: SOT-89
- ③: EMITTER

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

| SYMBOL | PARAMETER | RATING | UNIT |
|-----------|---|----------|------------|
| V_{CBO} | Collector to Base voltage | -20 | V |
| V_{EBO} | Emitter to Base voltage | -6 | V |
| V_{CEO} | Collector to Emitter voltage | -16 | V |
| I_C | Collector current | -2 | A |
| I_{CM} | Peak collector current | -3 | A |
| P_C | Collector dissipation($T_a=25^\circ C$) | 500 | mW |
| T_j | Junction temperature | +150 | $^\circ C$ |
| T_{stg} | Storage temperature | -55~+150 | $^\circ C$ |

MARKING



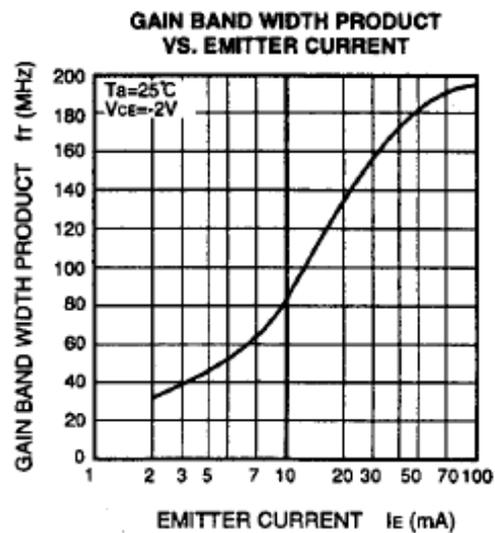
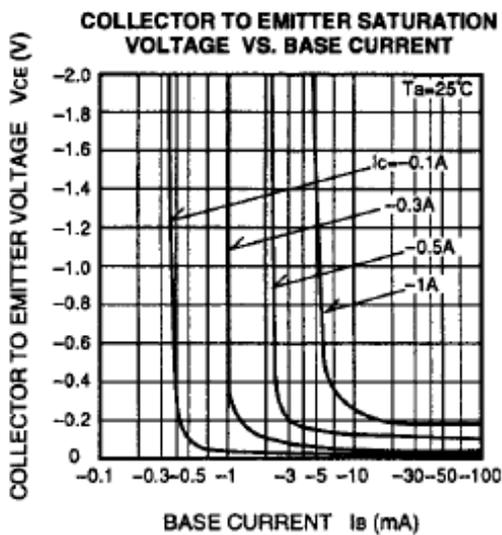
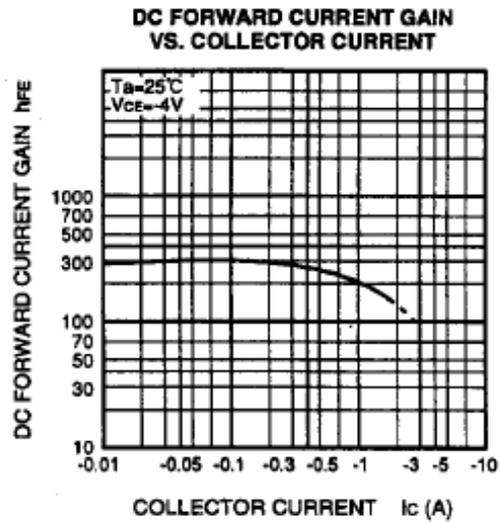
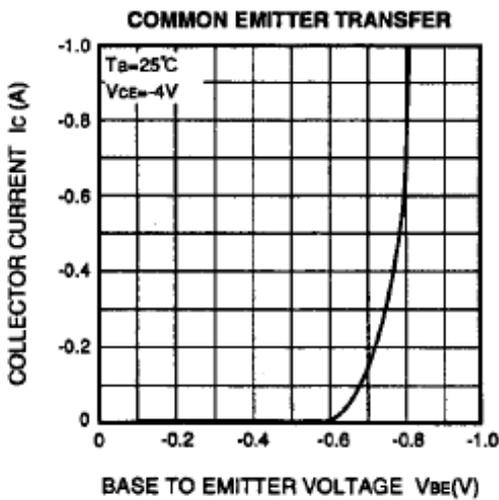
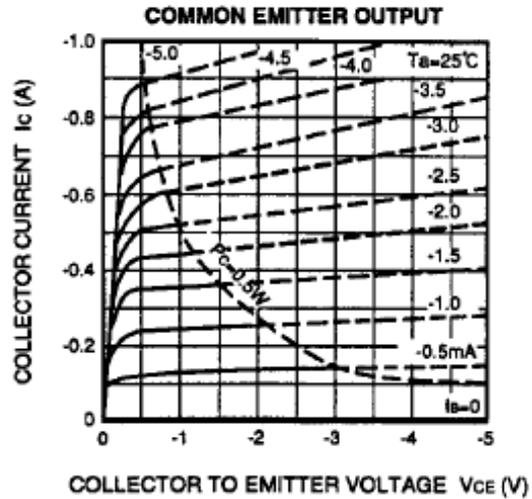
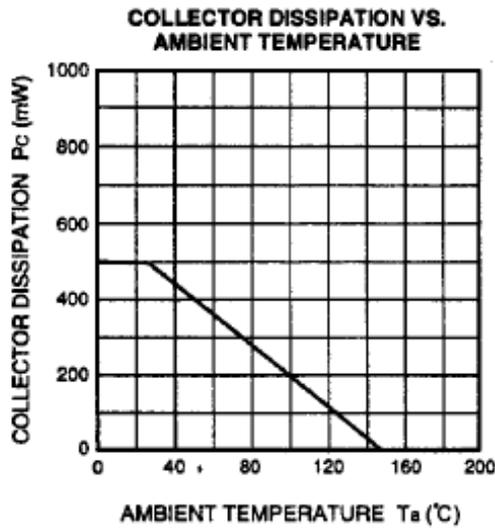
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

| SYMBOL | PARAMETER | TEST CONDITIONS | LIMITS | | | UNIT |
|-----------------|------------------------------|--------------------------------|--------|-------|------|---------|
| | | | MIN | TYP | MAX | |
| $V_{(BR)CBO}$ | C to B breakdown voltage | $I_C=-10\mu A, I_E=0mA$ | -20 | - | - | V |
| $V_{(BR)EBO}$ | E to B breakdown voltage | $I_E=-10\mu A, I_C=0mA$ | -6 | - | - | V |
| $V_{(BR)CEO}$ | C to E breakdown voltage | $I_C=-2mA, R_{BE}=\infty$ | -16 | - | - | V |
| I_{CBO} | Collector cut off current | $V_{CB}=-16V, I_E=0mA$ | - | - | -0.2 | μA |
| I_{EBO} | Emitter cut off current | $V_{EB}=-4V, I_C=0mA$ | - | - | -0.2 | μA |
| $h_{FE} \times$ | DC forward current gain | $V_{CE}=-4V, I_C=-100mA$ | 150 | - | 800 | - |
| $V_{CE(sat)}$ | C to E saturation voltage | $I_C=-1A, I_B=-50mA$ | - | -0.17 | -0.3 | V |
| fT | Gain bandwidth product | $V_{CE}=-2V, I_E=10mA$ | - | 80 | - | MHz |
| Cob | Collector output capacitance | $V_{CB}=-10V, I_E=0mA, f=1MHz$ | - | 42 | - | pF |

※) It shows h_{FE} classification at right table.

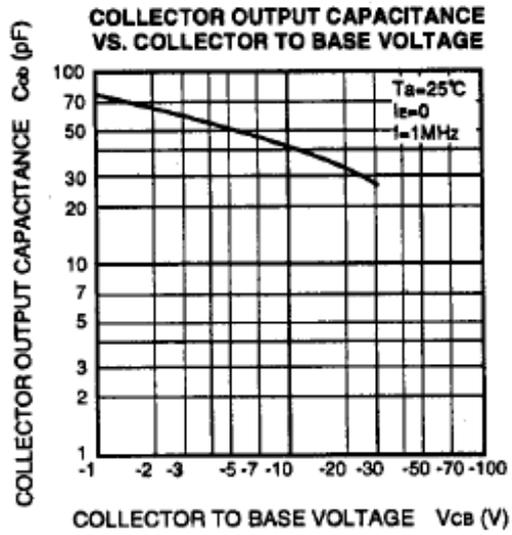
| Item | E | F | G |
|----------|---------|---------|---------|
| h_{FE} | 150~300 | 250~500 | 400~800 |

TYPICAL CHARACTERISTICS



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