

2SA1282, 2SA1282A

FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

Mitsubishi 2SA1282, 2SA1282A is a silicon PNP epitaxial type transistor designed for small type motor drive, solenoid drive and power supply application.

Complementary with 2SC3242, 2SC3242A.

FEATURE

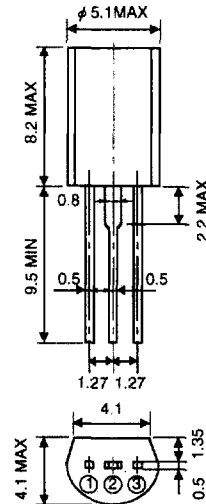
- High collector current $I_C = -2A$
- Low collector saturation voltage
 $V_{CE(sat)} = -0.17V$ typ (@ $I_C = -1A$)
- High $h_{FE} = 150$ to 800
- High collector dissipation $P_C = 900mW$

APPLICATION

VCR, deck, small type motor drive for player, power supply, etc.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

- ① : EMITTER
 - ② : COLLECTOR
 - ③ : BASE
- EIAJ : —
JEDEC : —

Note)

The dimension without tolerance represent central value.

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

| Symbol | Parameter | Ratings | | Unit |
|-----------|------------------------------|---------|-------------|------------|
| | | 2SA1282 | 2SA1282A | |
| V_{CBO} | Collector to Base voltage | -20 | -20 | V |
| V_{EBO} | Emitter to Base voltage | -6 | -6 | V |
| V_{CEO} | Collector to Emitter voltage | -16 | -20 | V |
| I_{CM} | Peak collector current | | -3 | A |
| I_C | Collector current | | -2 | A |
| P_C | Collector dissipation | | 900 | mW |
| T_j | Junction temperature | | +150 | $^\circ C$ |
| T_{stg} | Storage temperature | | -55 to +150 | $^\circ C$ |

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

| Symbol | Parameter | Test conditions | Limits | | | | | | Unit |
|---------------|-------------------------------|-------------------------------------|---------|-------|------|----------|-------|------|---------|
| | | | 2SA1282 | | | 2SA1282A | | | |
| | | | Min | Typ | Max | Min | Typ | Max | |
| $V_{(BR)CBO}$ | C to B break down voltage | $I_C = -10 \mu A, I_E = 0$ | -20 | | | -20 | | | V |
| $V_{(BR)EBO}$ | E to B break down voltage | $I_E = -10 \mu A, I_C = 0$ | -6 | | | -6 | | | V |
| $V_{(BR)CEO}$ | C to E break down voltage | $I_C = -2 mA, R_{BE} = \infty$ | -16 | | | -20 | | | V |
| I_{CBO} | Collector cut off current | $V_{CB} = -16 V, I_E = 0$ | | | -0.2 | | | -0.2 | μA |
| I_{EBO} | Emitter cut off current | $V_{EB} = -4V, I_C = 0$ | | | -0.2 | | | -0.2 | μA |
| $h_{FE} *$ | DC forward current gain | $V_{CE} = -4 V, I_C = -100mA$ | 150 | | 800 | 150 | | 500 | — |
| $V_{CE(sat)}$ | C to E saturation Voltage | $I_C = -1A, I_E = -50mA$ | | -0.17 | -0.3 | | -0.17 | -0.3 | V |
| f_T | Gain band width product | $V_{CE} = -2V, I_E = 10mA$ | | 80 | | | 80 | | MHz |
| C_{ob} | Collector out put capacitance | $V_{CB} = -10V, I_E = 0, f = 1MHz,$ | | 42 | | | 42 | | pF |

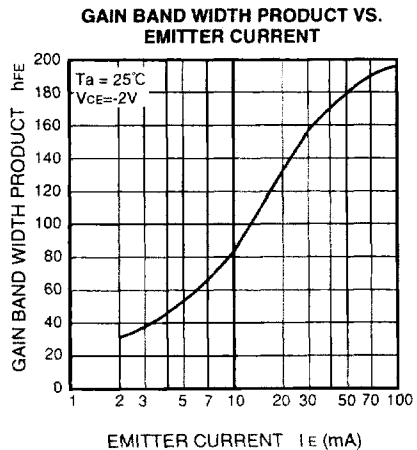
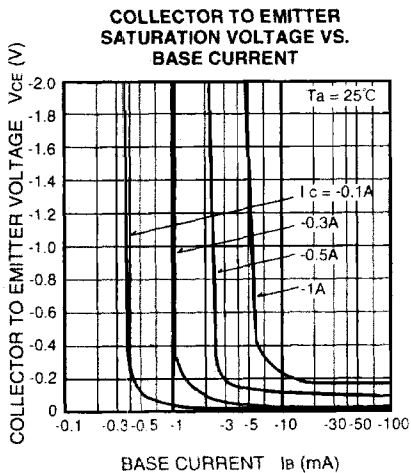
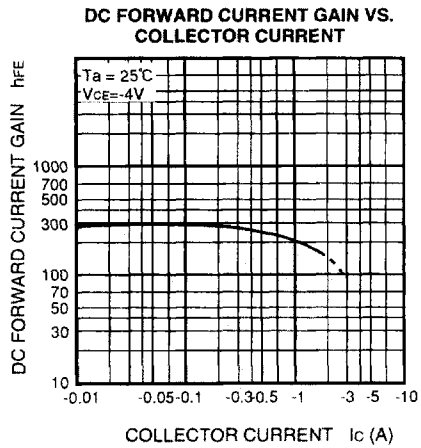
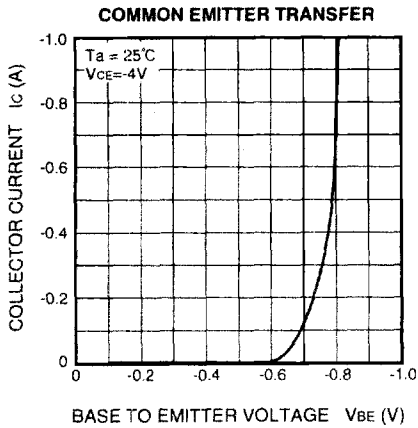
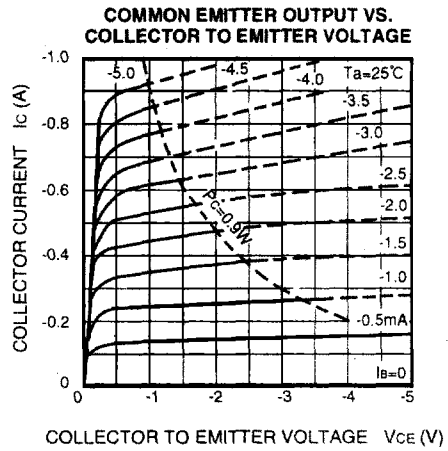
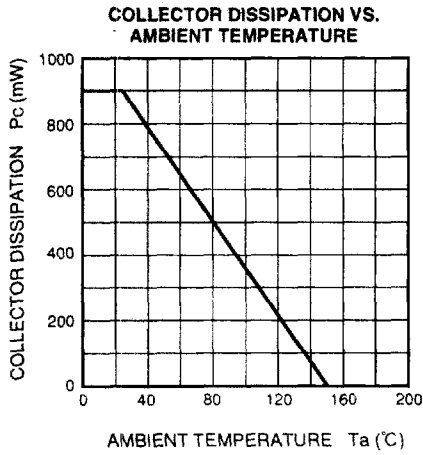
* : It shows h_{FE} classification in right table.

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

2SA1282, 2SA1282A

FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

TYPICAL CHARACTERISTICS



2SA1282, 2SA1282A

FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

