

<Transistor>

# 2SC5482

For Low Frequency Power Amplify Application  
Silicon NPN Epitaxial Type Micro(Frame type)

## DESCRIPTION

2SC5482 is a silicon NPN epitaxial designed for relaydrive or power supply application.

## FEATURE

- High collector current  
 $I_C=1A$
- Low  $V_{CE(sat)}$   
 $V_{CE(sat)}=0.11V$  typ (@  $I_C=500mA, I_B=25mA$ )
- High voltage  
 $V_{CEO}=60V$
- High collector dissipation  
 $P_C=600mW$

## APPLICATION

Relay drive, power supply for audio equipment, VCR, etc

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

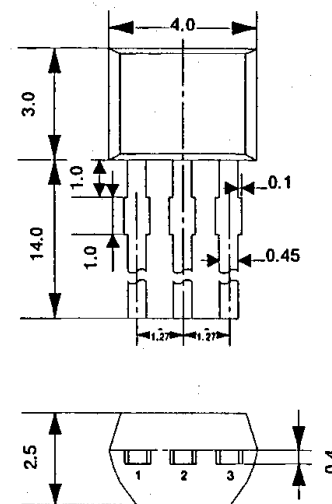
| SYMBOL    | PARAMETER                                  | RATINGS   | UNIT       |
|-----------|--|-----------|------------|
| $V_{CBO}$ | Collector to Base voltage                  | 60        | V          |
| $V_{EBO}$ | Emitter to Base voltage                    | 6         | V          |
| $V_{CEO}$ | Collector to Emitter voltage               | 60        | V          |
| $I_{CM}$  | Peak Collector current                     | 2         | A          |
| $I_C$     | Collector current                          | 1         | A          |
| $P_C$     | Collector dissipation ( $T_a=25^\circ C$ ) | 600       | mW         |
| $T_j$     | Junction temperature                       | +150      | $^\circ C$ |
| $T_{stg}$ | Storage temperature                        | -55to+150 | $^\circ C$ |

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

| SYMBOL        | PARAMETER                    | TEST CONDITIONS             | LIMITS |      |     | UNIT    |
|---------------|------------------------------|-----------------------------|--------|------|-----|---------|
|               |                              |                             | MIN    | TYP  | MAX |         |
| $V_{(BR)CBO}$ | C to B break down voltage    | $I_C=10\mu A, I_E=0$        | 60     |      |     | V       |
| $V_{(BR)EBO}$ | E to B break down voltage    | $I_E=10\mu A, I_C=0$        | 6      |      |     | V       |
| $V_{(BR)CEO}$ | C to E break down voltage    | $I_C=2mA, R_{BE}=\infty$    | 60     |      |     | V       |
| $I_{CBO}$     | Collector cut off current    | $V_{CB}=50V, I_E=0$         |        |      | 0.2 | $\mu A$ |
| $I_{EBO}$     | Emitter cut off current      | $V_{EB}=4V, I_C=0$          |        |      | 0.2 | $\mu A$ |
| $h_{FE} *$    | DC forward current gain      | $V_{CE}=4V, I_C=100mA$      | 55     |      | 300 | —       |
| $V_{CE(sat)}$ | C to E saturation voltage    | $I_C=500mA, I_B=25mA$       |        | 0.11 | 0.3 | V       |
| $f_T$         | Gain band width product      | $V_{CE}=2V, I_E=-10mA$      |        | 120  |     | MHz     |
| $C_{ob}$      | Collector output capacitance | $V_{CB}=10V, I_E=0, f=1MHz$ |        | 14   |     | pF      |

OUTLINE DRAWING

UNIT:mm



## TERMINAL CONNECTOR

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

| ITEM     | C      | D      | E       |
|----------|--------|--------|---------|
| $h_{FE}$ | 55~110 | 90~180 | 150~300 |

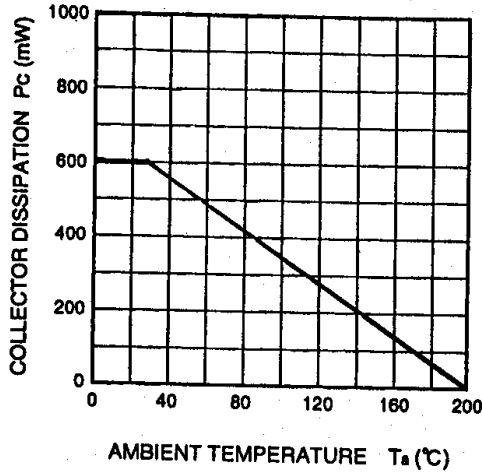
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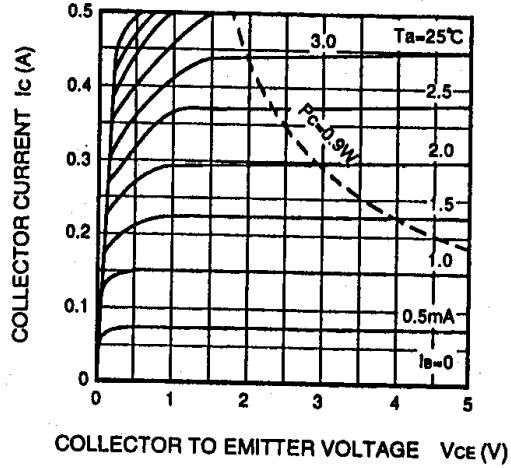
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## TYPICAL CHARACTERISTICS

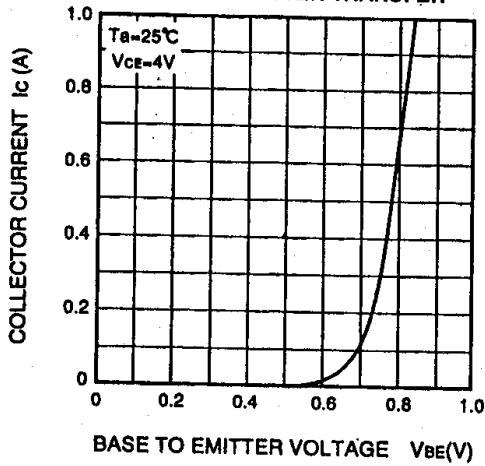
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



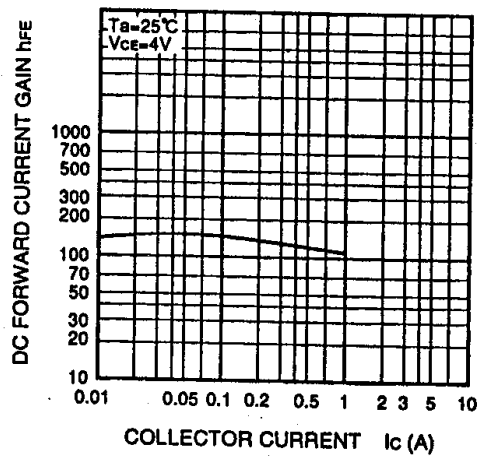
COMMON EMITTER OUTPUT



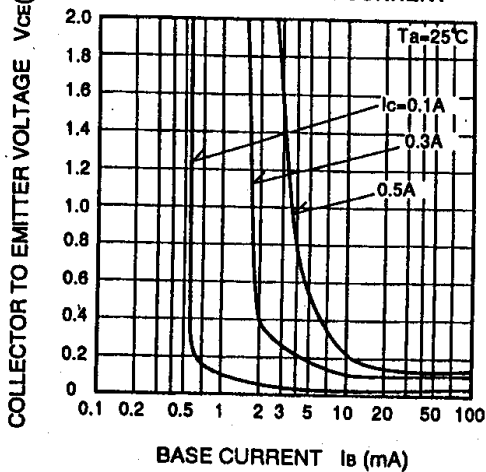
COMMON EMITTER TRANSFER



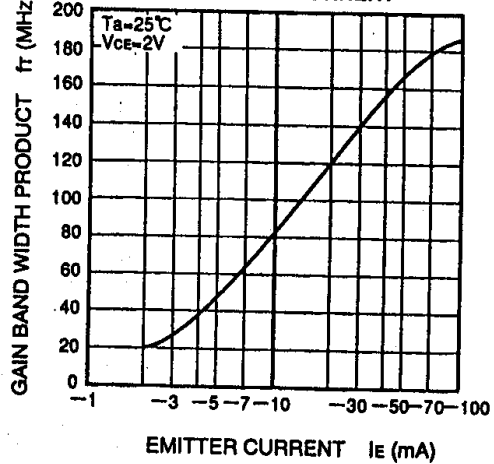
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT



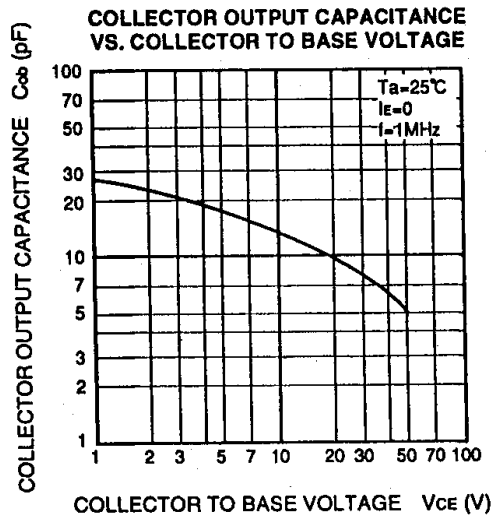
GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



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