

... <SMALL-SIGNAL TRANSISTOR>

2SA1282, 2SA1282A

FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

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

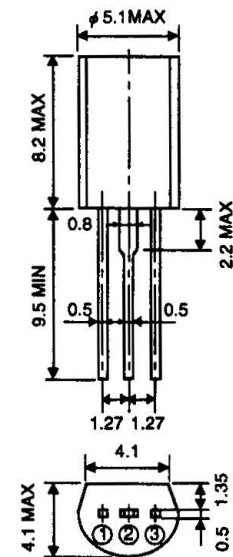
- High collector current $I_C = -2A$
- Low collector saturation voltage
 $V_{CE(sat)} = -0.17V$ typ (@ $I_C = -1A$)
- High $h_{FE} = 150$ to 800
- High collector dissipation $P_C = 900mW$

APPLICATION

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

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

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

Note)

The dimension without tolerance represent central value.

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings		Unit
		2SA1282	2SA1282A	
V _{CB0}	Collector to Base voltage	-20	-20	V
V _{EB0}	Emitter to Base voltage	-6	-6	V
V _{CE0}	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		°C
T _{stg}	Storage temperature	-55 to +150		°C

ELECTRICAL CHARACTERISTICS (Ta=25°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 μA, I _E = 0	-20			-20			V
V _{(BR)EBO}	E to B break down voltage	I _E = -10 μA, I _C = 0	-6			-6			V
V _{(BR)CEO}	C to E break down voltage	I _C = -2 mA, R _{BE} = ∞	-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 _B = -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.

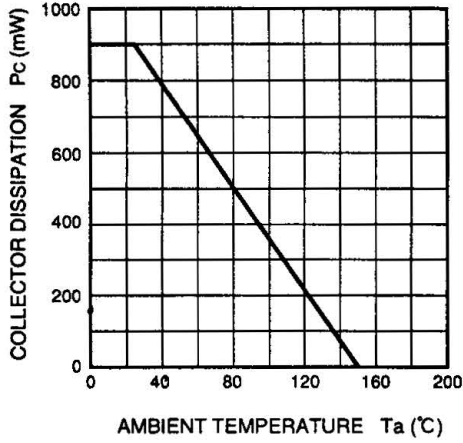
Item	E	F	G
h _{FE}	150 to 300	250 to 500	400 to 800

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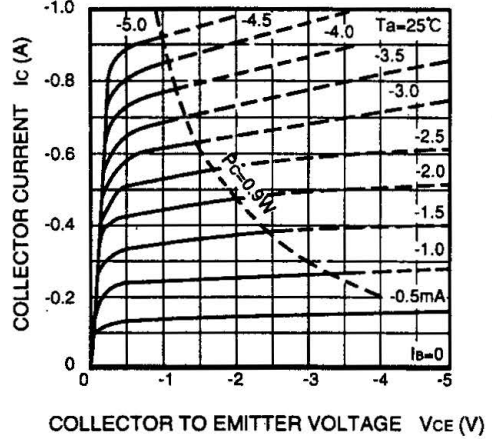
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TYPICAL CHARACTERISTICS

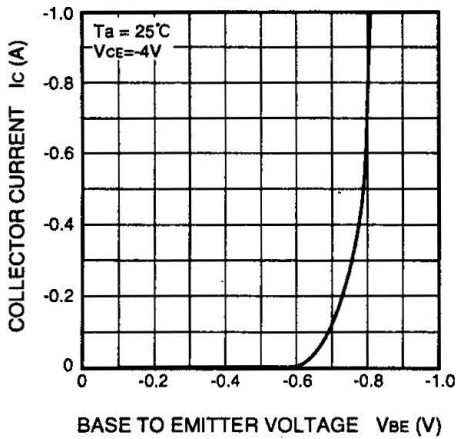
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



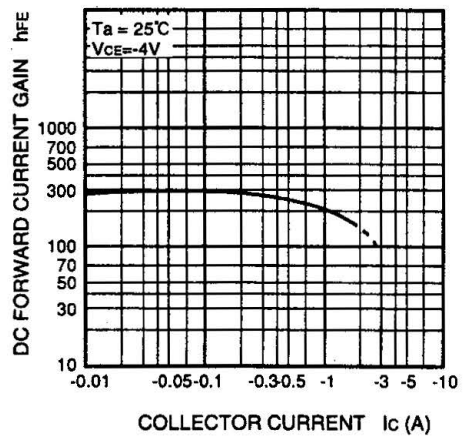
COMMON EMITTER OUTPUT VS. COLLECTOR TO EMITTER VOLTAGE



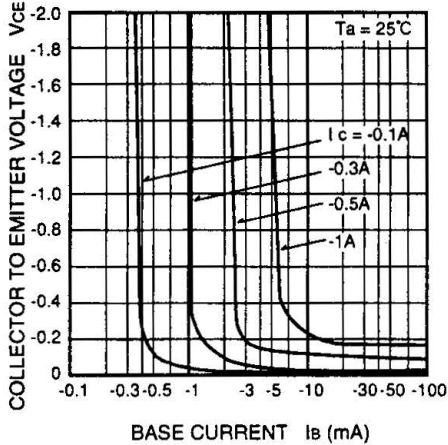
COMMON EMITTER TRANSFER



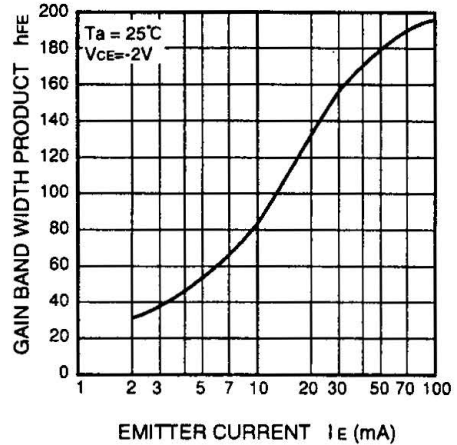
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT



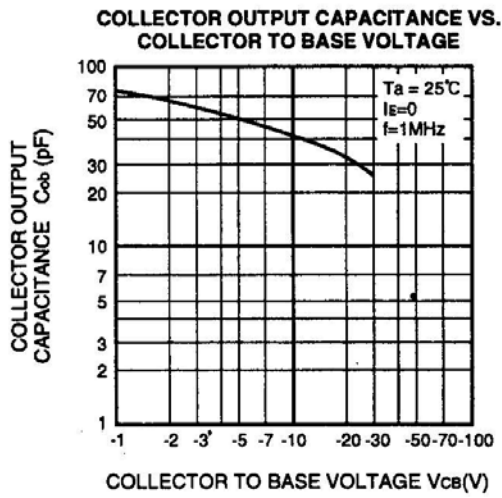
GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



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