

(SMALL-SIGNAL TRANSISTOR)

2SA1286

FOR SMALL TYPE MOTOR, PLUNGER DRIVE APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

2SA1286 is silicon PNP epitaxial type transistor. Designed with high collector current and high hFE.
Complementary with 2SC3246.

FEATURE

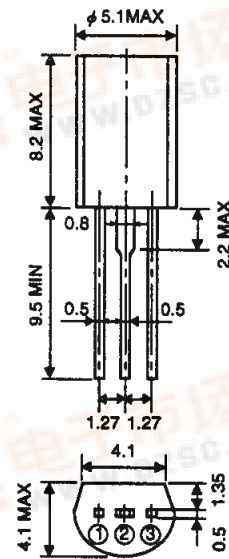
- High hFE hFE=400 to 800
- High collector current (IC=-1.5A, ICM=-3A)
- Low collector to emitter saturation voltage.
VCE(sat)=-0.25V typ (@ IC=-1A, IB=-20mA)
- High collector dissipation PC=900mW

APPLICATION

Small type motor drive plunger for VCR, tape deck, player, drive for relay, 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
VcBo	Collector to Base voltage	-30	V
VEBo	Emitter to Base voltage	-6	V
VCEo	Collector to Emitter voltage	-20	V
ICM	Peak collector current	-3	A
IC	Collector current	-1.5	A
PC	Collector dissipation(Ta=25°C)	900	mW
Tj	Junction temperature	+150	°C
Tstg	Storage temperature	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)CBO	C to B break down voltage	IC=-10 μA, IE=0	-30			V
V(BR)EBO	E to B break down voltage	IE=-10 μA, IC=0	-6			V
V(BR)CEO	C to E break down voltage	IC=-1mA, RBE=∞	-20			V
ICBO	Collector cut off current	VCE=-20V, IE=0			-0.1	μA
IEBO	Emitter cut off current	VEB=-2V, IC=0			-0.1	μA
hFE *	DC forward current gain	VCE=-6V, IC=-500mA	400		800	—
VCE(sat)	C to E saturation voltage	IC=-1A, IB=-20mA		-0.25	-0.5	V
fr	Gain band width product	VCE=-10V, IE=10mA		90		MHz
Cob	Collector output capacitance	VCE=-10V, IE=0, f=1MHz		37		pF

* : It shows hFE classification in right table.

Item	G
hFE	400 to 800



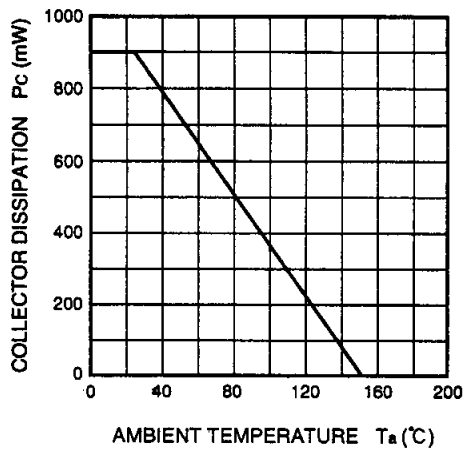
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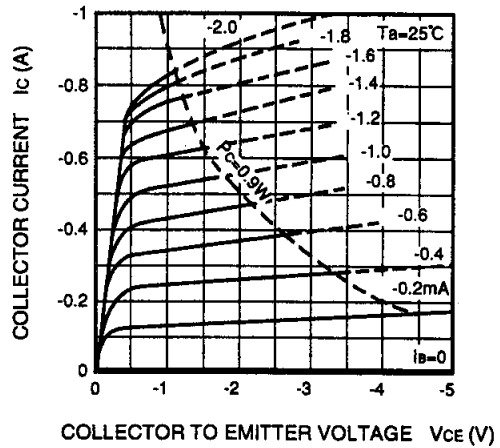
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TYPICAL CHARACTERISTICS

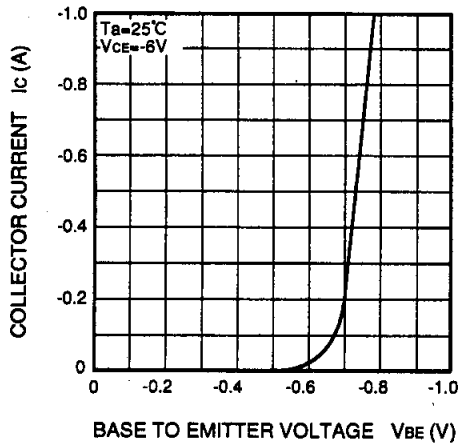
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



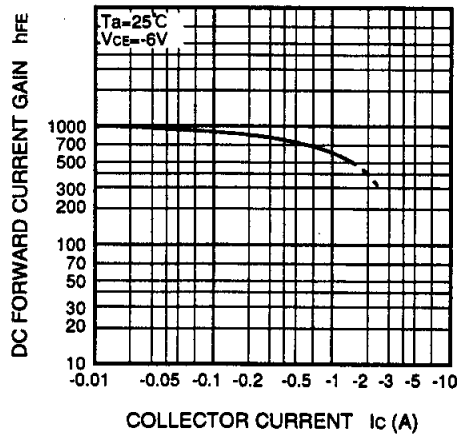
COMMON EMITTER OUTPUT



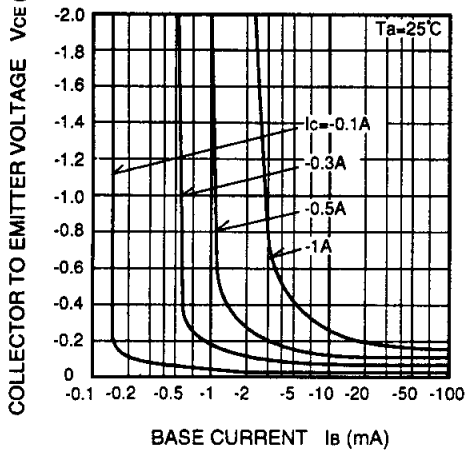
COMMON EMITTER TRANSFER



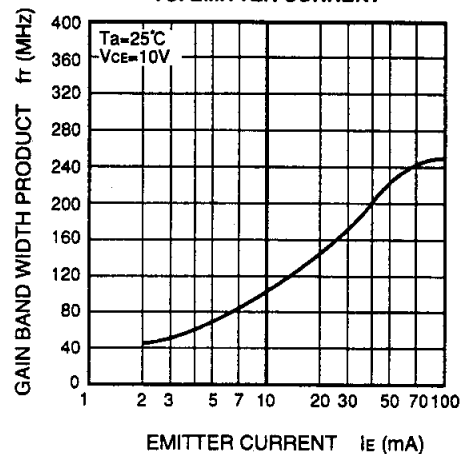
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT



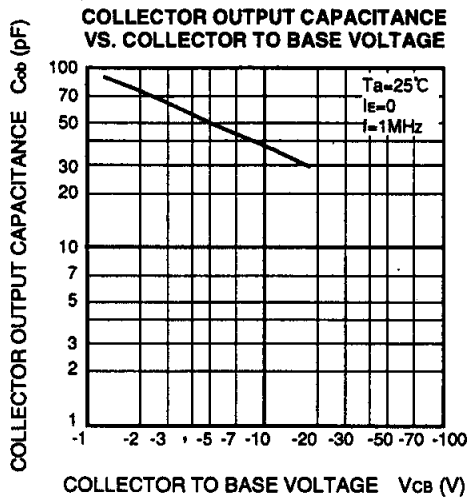
GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT



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