

(SMALL-SIGNAL TRANSISTOR)

2SA1369

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

DESCRIPTION

2SA1369 is a silicon PNP epitaxial type transistor designed with high collector dissipation, high collector current, high hFE.

Complementary with 2SC3439.

FEATURE

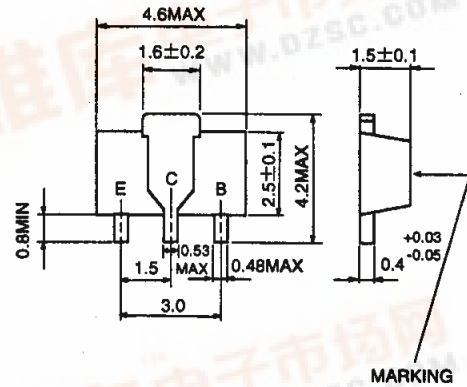
- High hFE hFE=400 to 800
- High collector current (ICM=-3A, IC=-1.5A)
- Small VCEO(sat) VCEO(sat)=-0.25V typ (@IC=-1A, IB=-20mA)
- High collector dissipation Pc=500mW
- Small package for mounting

APPLICATION

Small type motor drive for VCR, tape desk, player, drive for relay.

OUTLINE DRAWING

Unit:mm

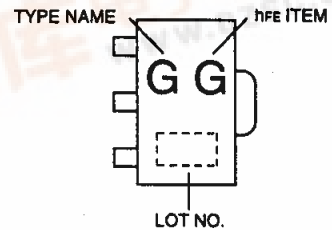


TERMINAL CONNECTOR

E : EMITTER
C : COLLECTOR EIAJ : SC-62
B : BASE JEDEC : -

Note)
The dimension without tolerance represent central value.

MARKING



MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V _{CB0}	Collector to Base voltage	-30	V
V _{EB0}	Emitter to Base voltage	-6	V
V _{CE0}	Collector to Emitter voltage	-20	V
I _{CM}	Peak Collector current	-3	A
I _C	Collector current	-1.5	A
P _C	Collector dissipation(Ta=25°C)	500	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
			Min	Typ	Max	
V _{(BR)CBO}	C to B break down voltage	I _C =-10 μA, I _E =0	-30			V
V _{(BR)EBO}	E to B break down voltage	I _E =-10 μA, I _C =0	-6			V
V _{(BR)CEO}	C to E break down voltage	I _C =-1mA, R _{BE} =∞	-20			V
I _{CB0}	Collector cut off current	V _{CB} =-20V, I _E =0			-0.1	μA
I _{EB0}	Emitter cut off current	V _{EB} =-2V, I _C =0			-0.1	μA
hFE *	DC forward current gain	V _{CE} =-6V, I _C =-500mA	400		1200	—
V _{CE(sat)}	C to E saturation voltage	I _C =-1A, I _B =-20mA		-0.25	-0.5	V
f _T	Gain band width product	V _{CE} =-10V, I _E =10mA		90		MHz
C _{ob}	Collector output capacitance	V _{CB} =-10V, I _E =0, f=1MHz		37		pF

* : It shows hFE classification in right table.

Marking	GG	GH
hFE	400 to 800	600 to 1200



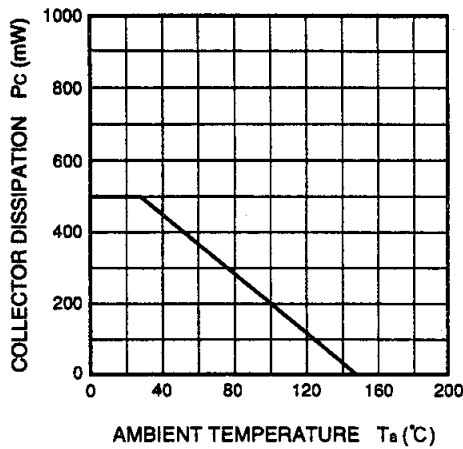
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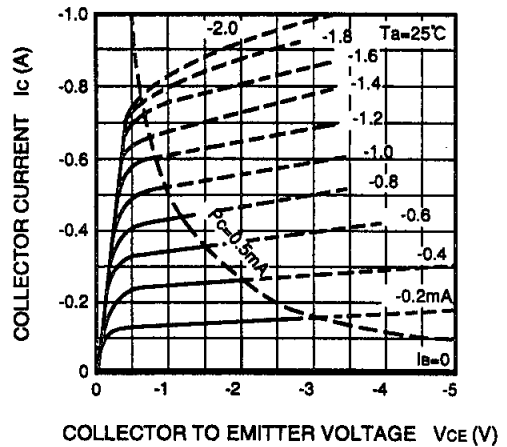
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TYPICAL CHARACTERISTICS

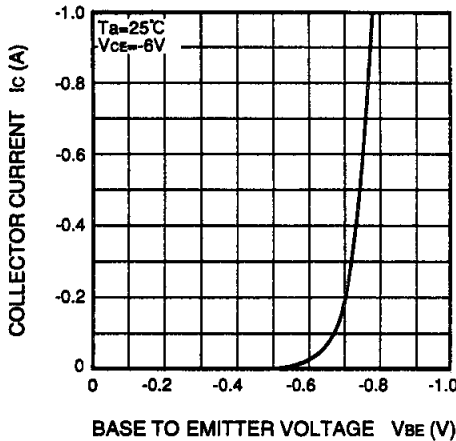
COLLECTOR DISSIPATION VS.
AMBIENT TEMPERATURE



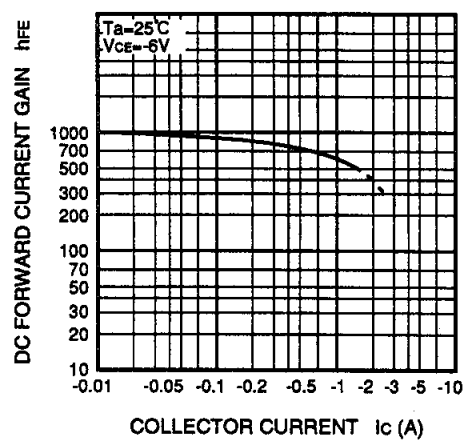
COMMON EMITTER OUTPUT



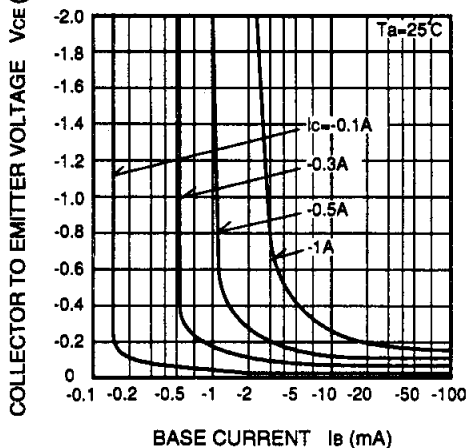
COMMON EMITTER TRANSFER



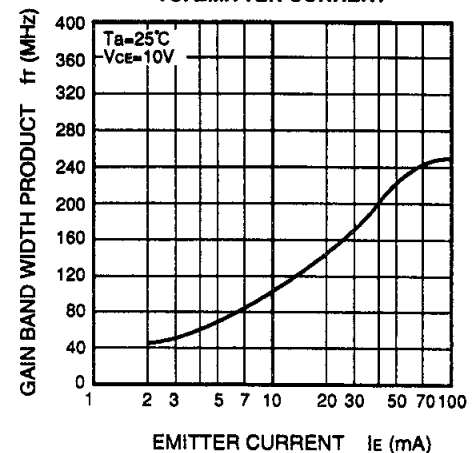
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION
VOLTAGE VS. BASE CURRENT



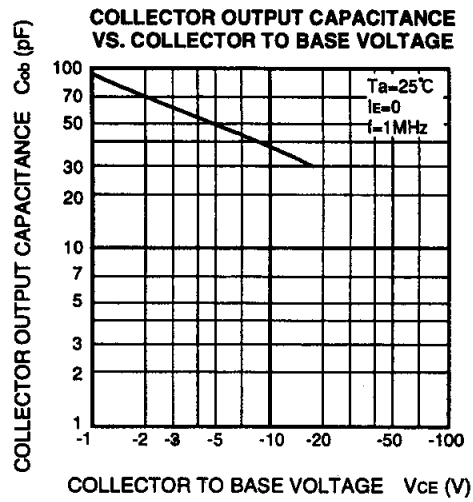
GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



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