

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

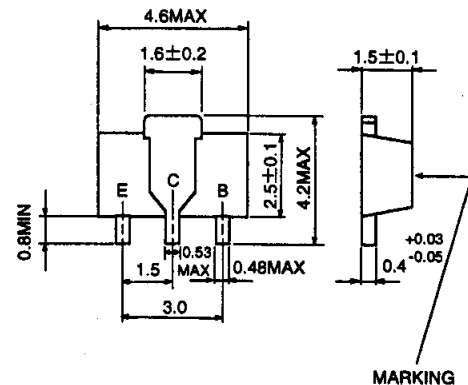
- High hFE hFE=400 to 800
- High collector current ($I_{CM}=-3A$, $I_C=-1.5A$)
- Small $V_{CEO(sat)}$ $V_{CEO(sat)}=-0.25V$ typ (@ $I_C=-1A$, $I_B=-20mA$)
- High collector dissipation $P_C=500mW$
- Small package for mounting

APPLICATION

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

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

E : EMITTER
C : COLLECTOR
B : BASE

EIAJ : SC-62
JEDEC : -

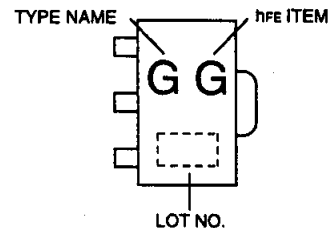
Note)

The dimension without tolerance represent central value.

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

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	-30	V
V_{EBO}	Emitter to Base voltage	-6	V
V_{CEO}	Collector to Emitter voltage	-20	V
I_{CM}	Peak Collector current	-3	A
I_C	Collector current	-1.5	A
P_C	Collector dissipation($T_a=25^\circ C$)	500	mW
T_j	Junction temperature	+150	$^\circ C$
T_{stg}	Storage temperature	-55 to +150	$^\circ C$

MARKING

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

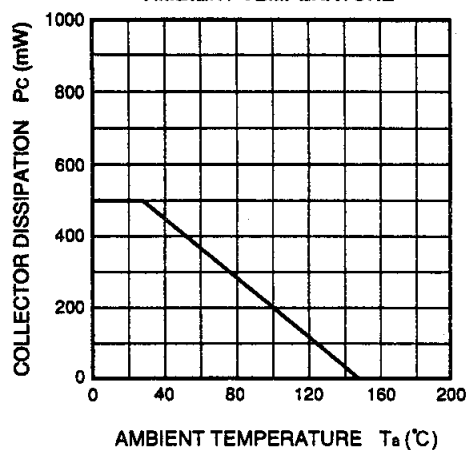
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=-10\mu A, I_E=0$	-30			V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=-10\mu A, I_C=0$	-6			V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=-1mA, R_{BE}=\infty$	-20			V
I_{CBO}	Collector cut off current	$V_{CB}=-20V, I_E=0$			-0.1	μA
I_{EBO}	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 _r	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.

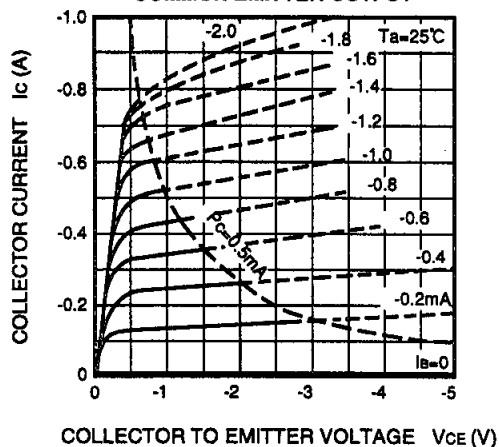
Marking	GG	GH
hFE	400 to 800	600 to 1200

TYPICAL CHARACTERISTICS

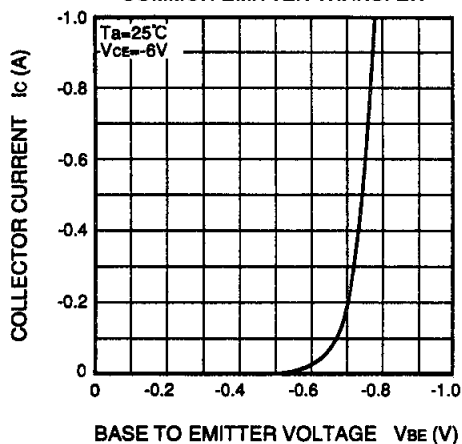
**COLLECTOR DISSIPATION VS.
AMBIENT TEMPERATURE**



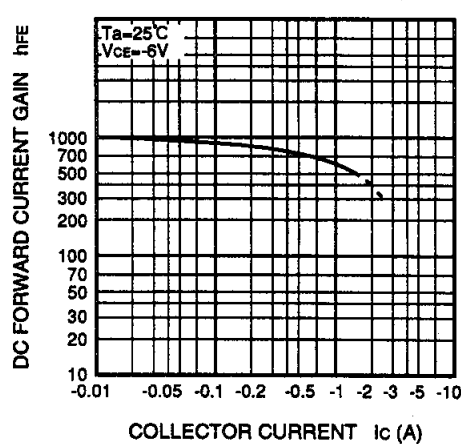
COMMON EMITTER OUTPUT



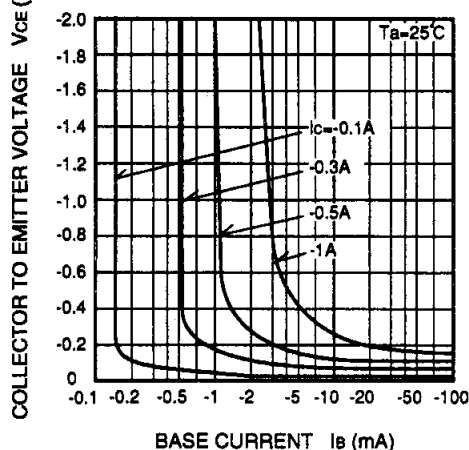
COMMON EMITTER TRANSFER



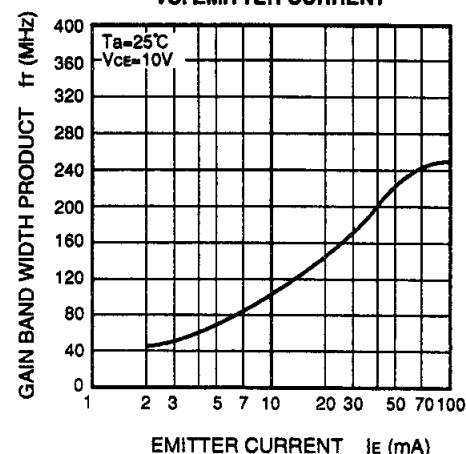
**DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT**



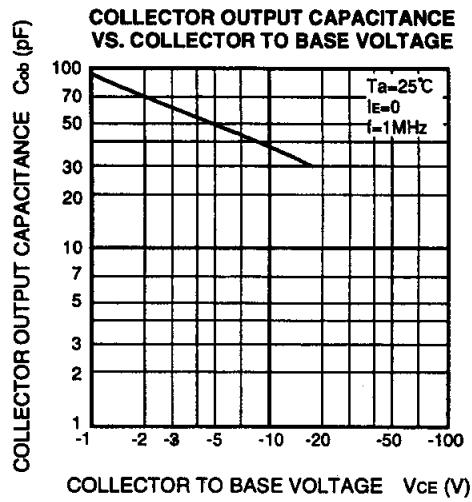
**COLLECTOR TO EMITTER SATURATION
VOLTAGE VS. BASE CURRENT**



**GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT**



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SILICON PNP EPITAXIAL TYPE





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