

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**

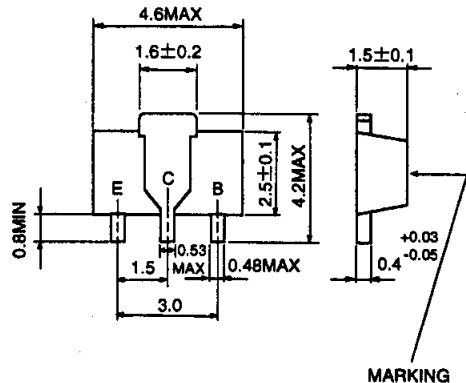
- High hFE hFE=400 to 800
- High collector current (ICM=-3A, IC=-1.5A)
- Small VCEO(sat) VCEO(sat)=-0.25V typ (@ IC=-1A, IB=-20mA)
- High collector dissipation Pc=500mW
- Small package for mounting

**APPLICATION**

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

**OUTLINE DRAWING**

Unit:mm



**TERMINAL CONNECTOR**

E : EMITTER  
C : COLLECTOR  
B : BASE

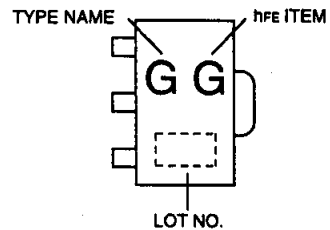
EIAJ : SC-62  
JEDEC : -

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)	500	mW
Tj	Junction temperature	+150	°C
Tstg	Storage temperature	-55 to +150	°C

**MARKING**



**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		1200	—
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	VCB=-10V, IE=0, f=1MHz		37		pF

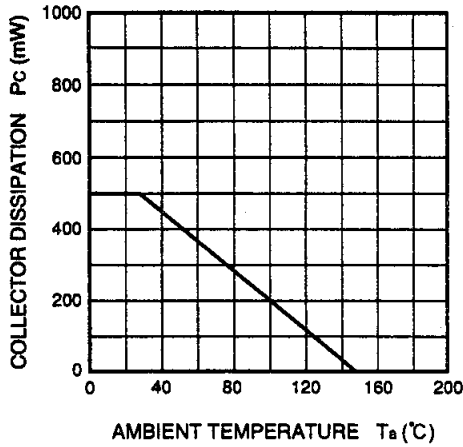
\* : It shows hFE classification in right table.

Marking	GG	GH
hFE	400 to 800	600 to 1200

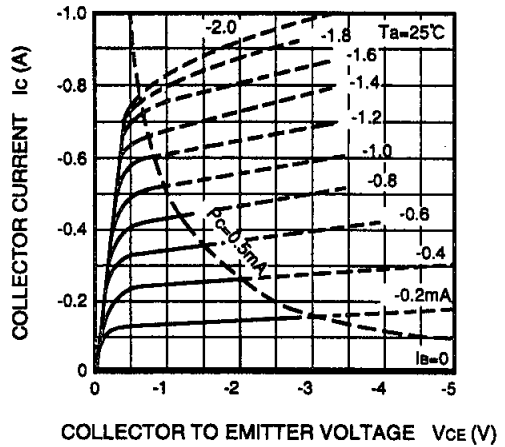
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**TYPICAL CHARACTERISTICS**

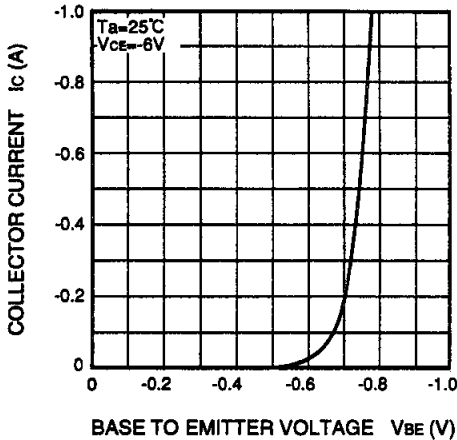
**COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE**



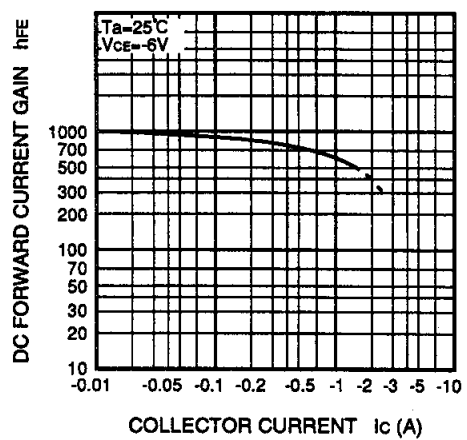
**COMMON EMITTER OUTPUT**



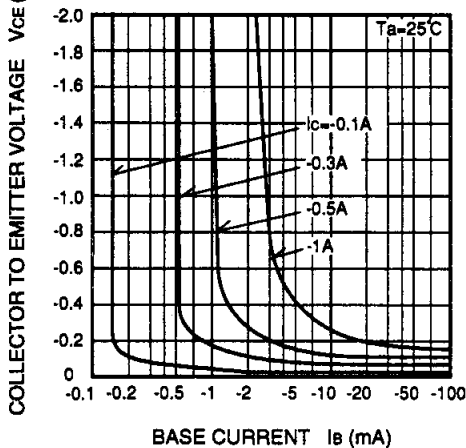
**COMMON EMITTER TRANSFER**



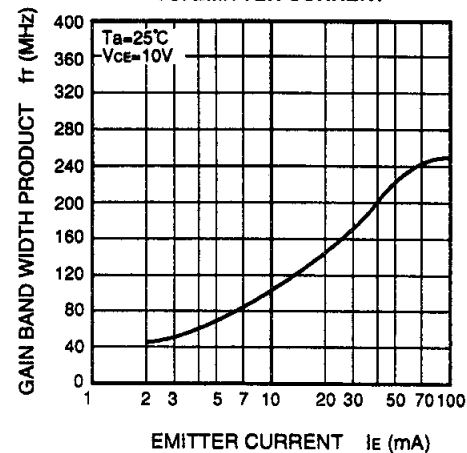
**DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT**



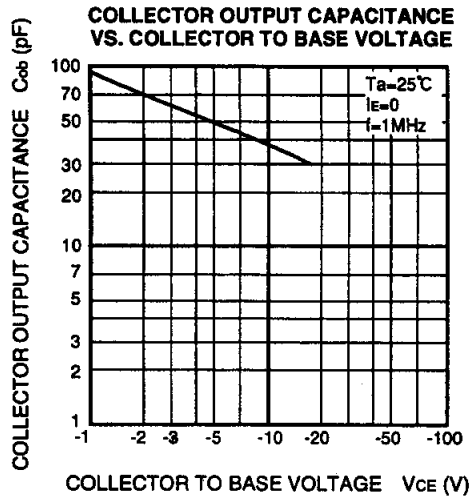
**COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT**



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



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