

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**

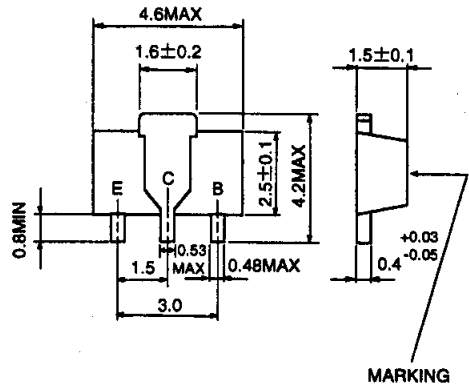
- High hFE hFE=400 to 800
- High collector current (ICM=-3A, IC=-1.5A)
- Small VCEO(sat) VCEO(sat)=-0.25V typ (@ IC=-1A, IB=-20mA)
- High collector dissipation Pc=500mW
- Small package for mounting

**APPLICATION**

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

**OUTLINE DRAWING**

Unit:mm



**TERMINAL CONNECTOR**

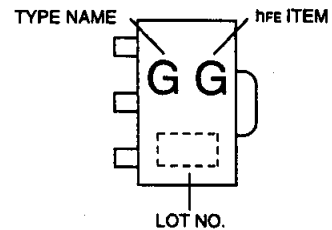
- E : EMITTER
  - C : COLLECTOR
  - B : BASE
- EIAJ : SC-62  
JEDEC : -

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

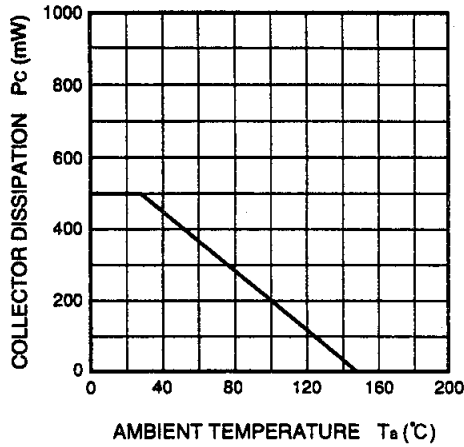
\* : It shows hFE classification in right table.

Marking	GG	GH
hFE	400 to 800	600 to 1200

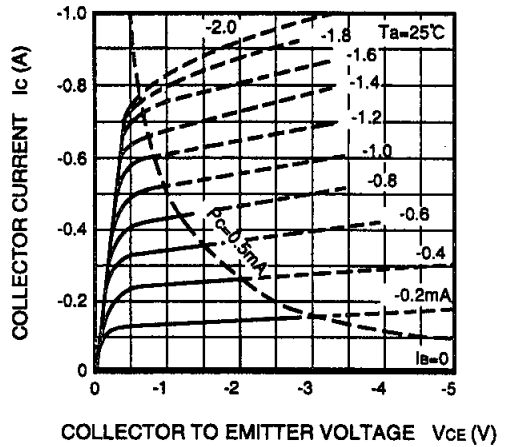
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TYPICAL CHARACTERISTICS

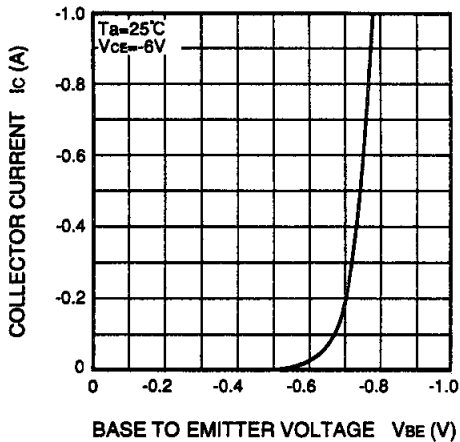
COLLECTOR DISSIPATION VS.  
AMBIENT TEMPERATURE



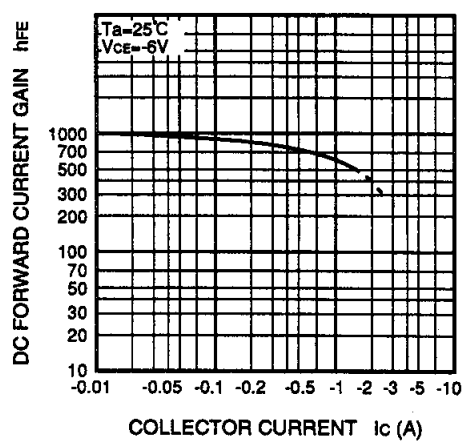
COMMON EMITTER OUTPUT



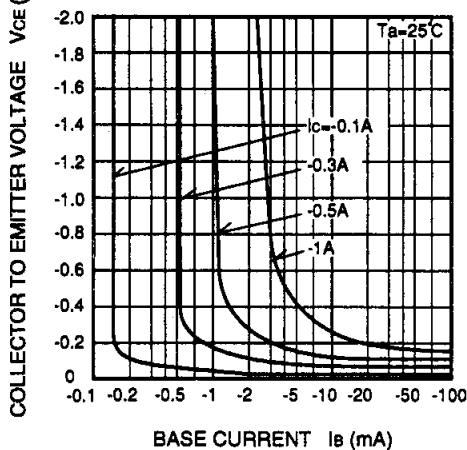
COMMON EMITTER TRANSFER



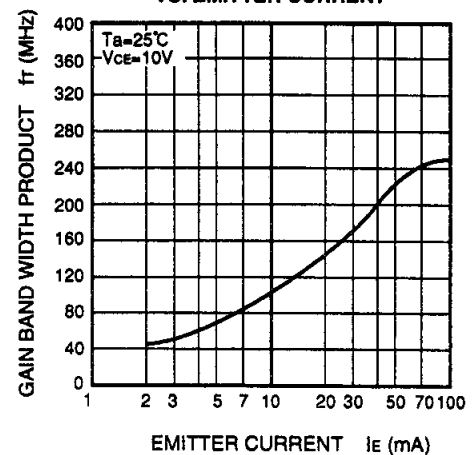
DC FORWARD CURRENT GAIN  
VS. COLLECTOR CURRENT



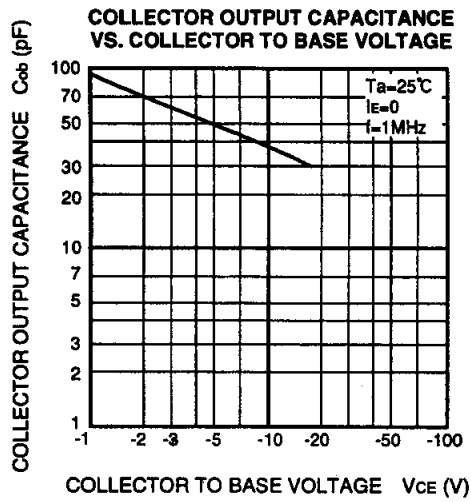
COLLECTOR TO EMITTER SATURATION  
VOLTAGE VS. BASE CURRENT



GAIN BAND WIDTH PRODUCT  
VS. EMITTER CURRENT



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