

**DESCRIPTION**

2SA1398 is a silicon PNP epitaxial type transistor designed with high collector current, small  $V_{CE(sat)}$ .  
Complementary with 2SC3580.

**FEATURE**

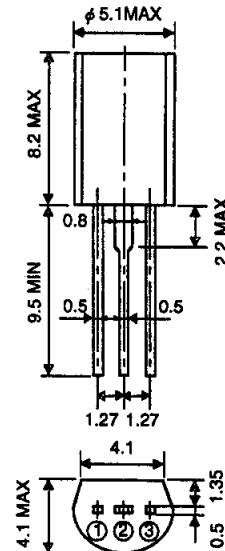
- High collector current  $I_{CM} = -1A$
- High gain band width product  $f_T = 180MHz$  typ
- Low collector to emitter saturation voltage  $V_{CE(sat)} = -0.25V$  typ
- Excellent linearity of DC forward current gain

**APPLICATION**

Small type motor drive, relay drive, power supply application.

**OUTLINE DRAWING**

Unit:mm



**TERMINAL CONNECTOR**

- ① : EMITTER
  - ② : COLLECTOR
  - ③ : BASE
- EIAJ : —  
JEDEC : —

Note)  
The dimension without tolerance represent central value.

**MAXIMUM RATINGS (Ta=25°C)**

Symbol	Parameter	Ratings	Unit
Vcbo	Collector to Base voltage	-25	V
VEBO	Emitter to Base voltage	-4	V
VCEO	Collector to Emitter voltage	-20	V
ICM	Peak Collector current	-1	A
IC	Collector current	-700	mA
Pc	Collector dissipation(Ta=25°C)	900	mW
Tj	Junction temperature	+150	°C
Tstg	Storage temperature	-55 to +150	°C

**ELECTRIAL CHARACTERISTICS RATINGS (Ta=25°C)**

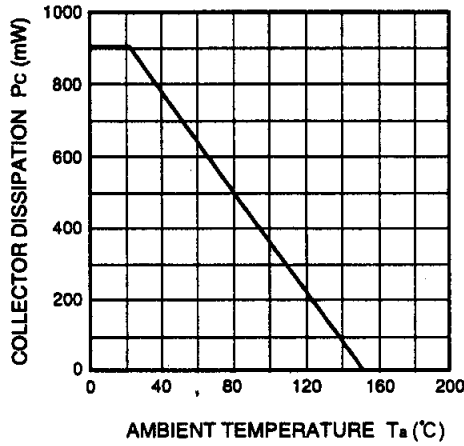
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)CBO	C to B break down voltage	IC=-10 μA, IE=0	-25			V
V(BR)EBO	E to B break down voltage	IE=-10 μA, IC=0	-4			V
V(BR)CEO	C to E break down voltage	IC=-100 μA, RBE=∞	-20			V
ICBO	Collector cut off current	VCE=-25V, IE=0			-1	μA
IEBO	Emitter cut off current	VEB=-2V, IC=0			-1	μA
hFE *	DC forward current gain	VCE=-4V, IC=-100mA	150		800	—
VCE(sat)	C to E saturation voltage	IC=-500mA, IB=-25mA		-0.25	-0.5	V
fT	Gain band width product	VCE=-6V, IE=10mA		180		MHz

\* : It shows hFE classification in right table.

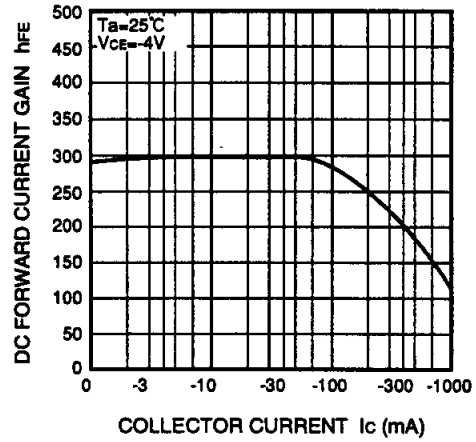
Item	E	F	G
hFE	150 to 300	250 to 500	400 to 800

TYPICAL CHARACTERISTICS

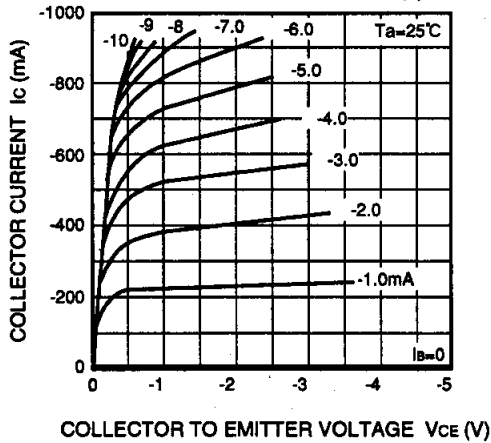
COLLECTOR DISSIPATION VS.  
AMBIENT TEMPERATURE



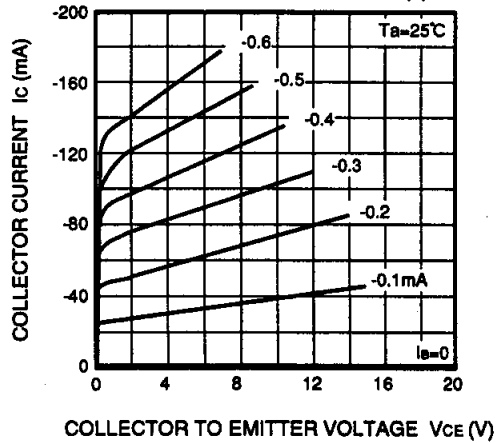
DC FORWARD CURRENT GAIN  
VS. COLLECTOR CURRENT



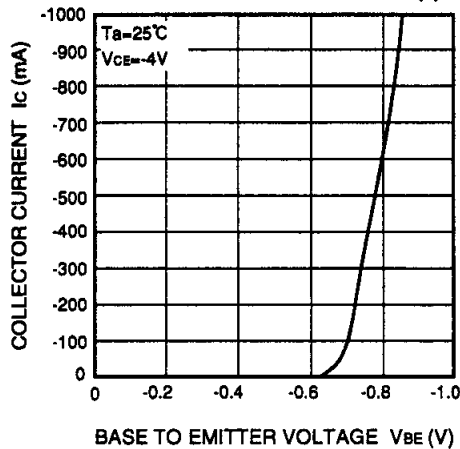
COMMON EMITTER OUTPUT (1)



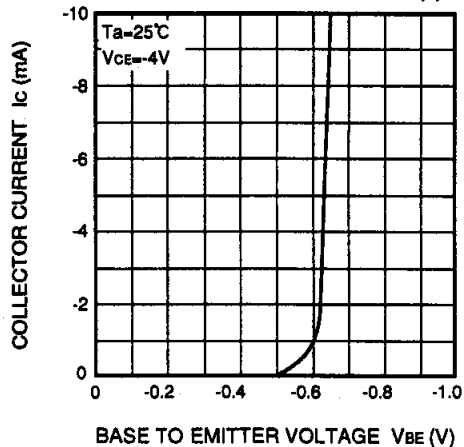
COMMON EMITTER OUTPUT (2)



COMMON EMITTER TRANSFER (1)



COMMON EMITTER TRANSFER (2)



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