2SA1366

FOR GENERAL PURPOSE HIGH CURRENT DRIVE APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

2SA1366 is a super mini silicon PNP epitaxial type transistor designed with high collector current, high voltage.
Complementary with 2SC3441.

FEATURE

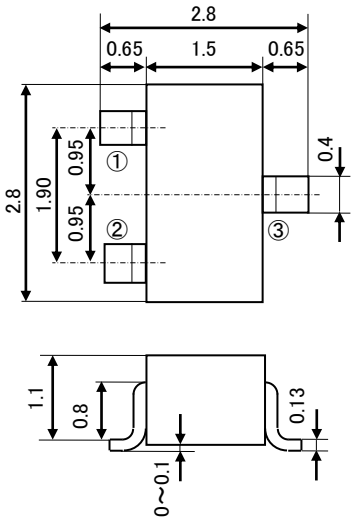
- ●High VCEO　VCEO=−50V
- ●Excellent linearity of DC forward current gain.
- ●Super mini package for easy mounting.
- ●High collector current　I_{CM}=−600mA
- ●High gain band width product　fT=150MHz typ

APPLICATION

For switching small type motor application.

OUTLINE DRAWING

Unit:mm

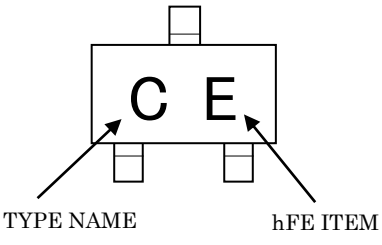


JEITA：SC-59
JEDEC：Similar to TO-236

TERMINAL CONNECTER
①：BASE
②：EMITTER
③：COLLECTOR

Note)
The dimension without tolerance represent central value.

MARKING



MAXIMUM RATINGS (Ta=25℃)

Parameter	Symbol	Ratings	Unit
Collector to Base voltage	V_{CBO}	−55	V
Emitter to Base voltage	V_{EBO}	−4	V
Collector to Emitter voltage	V_{CEO}	−50	V
Collector current	I_C	−400	mA
Peak Collector current	I_{CM}	−600	mA
Collector dissipation (Ta=25℃)	P_C	200	mW
Junction temperature	T_j	＋150	℃
Storage temperature	T_{stg}	−55～＋150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to B breakdown voltage	$V_{(BR)CBO}$	I_C=−10μA , I_E=0	−55	−	−	V
E to B breakdown voltage	$V_{(BR)EBO}$	I_E=−10μA , I_C=0	−4	−	−	V
C to E breakdown voltage	$V_{(BR)CEO}$	I_C=−100μA ,R_{BE}=∞	−50	−	−	V
Collector cut off current	I_{CBO}	V_{CB}=−25V, I_E=0	−	−	−1	μA
Emitter cut off current	I_{EBO}	V_{EB}=−2V, I_C=0	−	−	−1	μA
DC forward current gain ※	h_{FE}	V_{CE}=−4V, I_C=−100mA	90	−	500	−
C to E Saturation Voltage	$V_{CE(sat)}$	I_C=−200mA , I_B=−10mA	−	−0.17	−0.5	V
Gain band width product	fT	V_{CE}=−6V, I_E=10mA	−	150	−	MHz

※) It shows hFE classification in below table

Item	D	E	F
hFE	90 to 180	150 to 300	250 to 500

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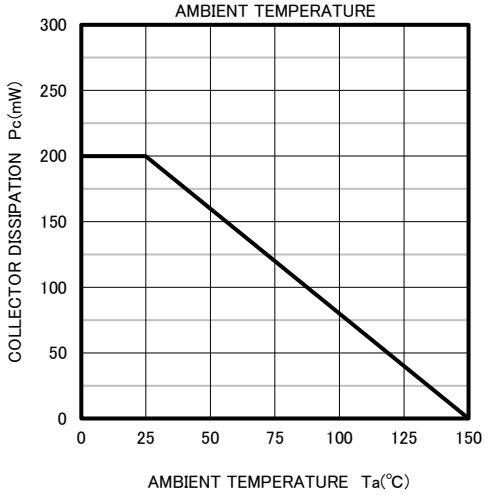
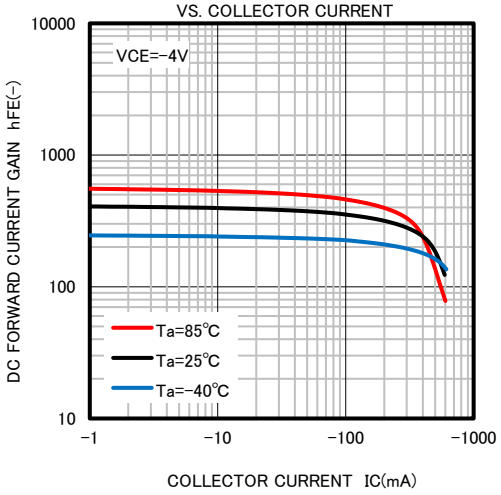
TYPICAL CHARACTERISTICS

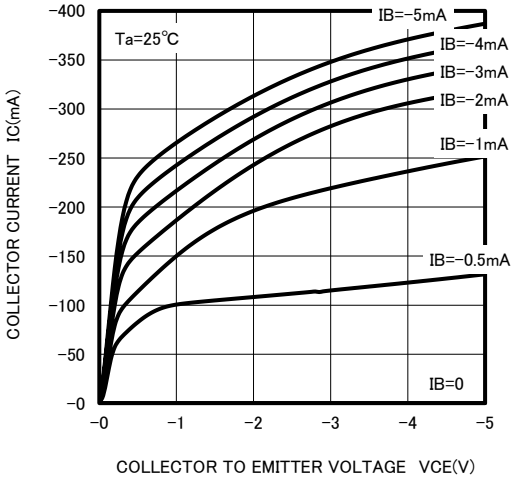
COLLECTOR DISSIPATION VS.
AMBIENT TEMPERATURE



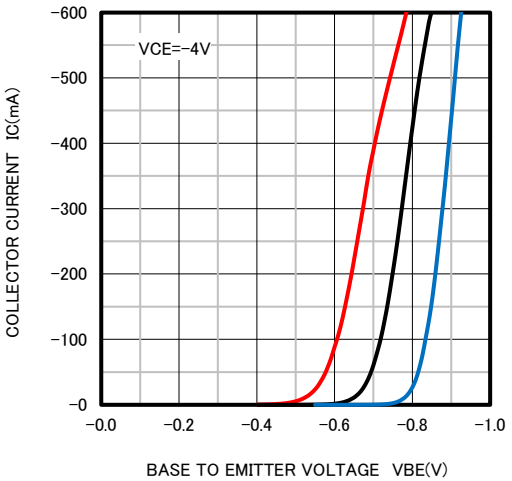
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



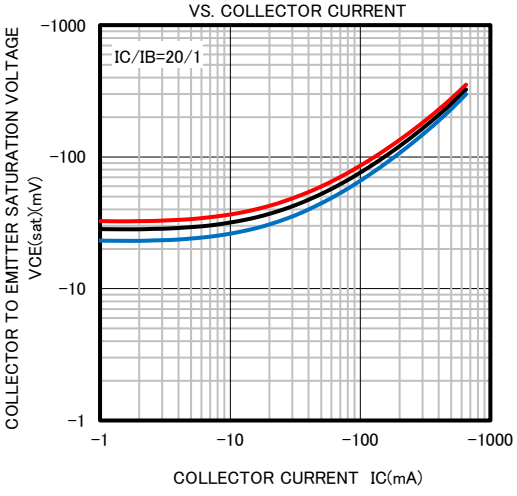
COMMON EMITTER OUTPUT



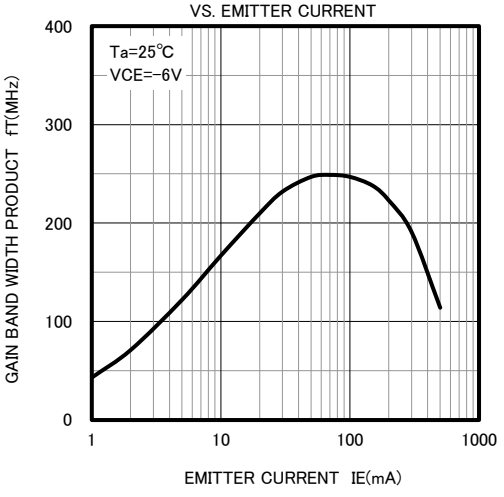
COMMON EMITTER TRANSFER



COLLECTOR TO EMITTER SATURATION VOLTAGE
VS. COLLECTOR CURRENT



GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



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