

2SC5211

FOR GENERAL-PERPOSE HIGH CURRENT DRIVE APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

2SC5211 is a silicon NPN epitaxial type transistor. It is designed with high collector current and high voltage.

Complementary with 2SA1945.

FEATURE

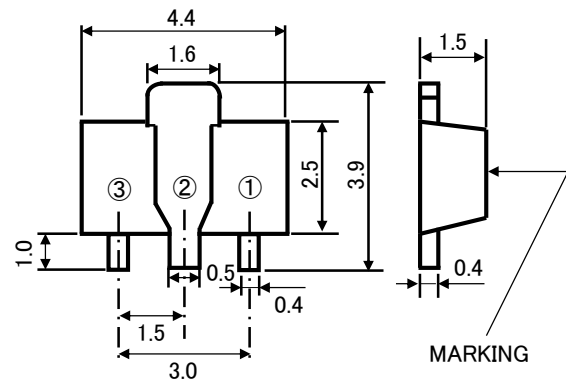
- Small package for mounting.
- High voltage $V_{CEO}=50V$
- High collector current $I_{CM}=600mA$
- Excellent linearity of DC forward current gain.
- High gain band width product $f_T=150MHz$ typ

APPLICATION

For switching, small type motor application

OUTLINE DRAWING

UNIT:mm



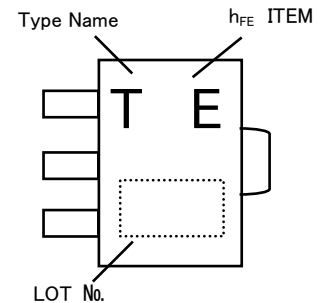
TERMINAL CONNECTOR

- ①: BASE JEITA: SC-62
- ②: COLLECTOR JEDEC: SOT-89
- ③: EMITTER

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

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	55	V
V_{EBO}	Emitter to Base voltage	4	V
V_{CEO}	Collector to Emitter voltage	50	V
I_C	Collector current	400	mA
I_{CM}	Peak collector current	600	mA
P_C	Collector dissipation	500	mW
T_j	Junction temperature	+150	$^\circ C$
T_{stg}	Storage temperature	-55 ~ +150	$^\circ C$

MARKING



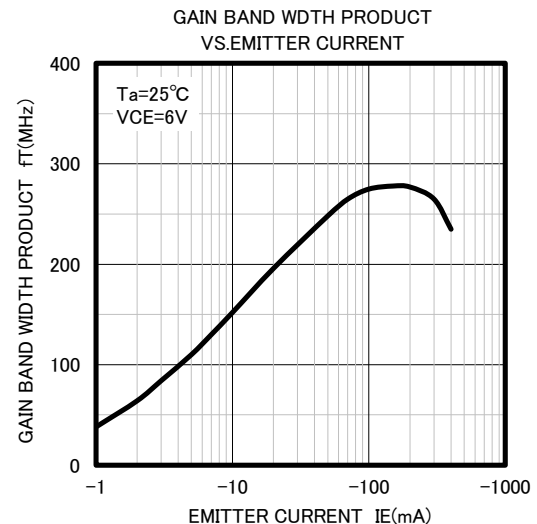
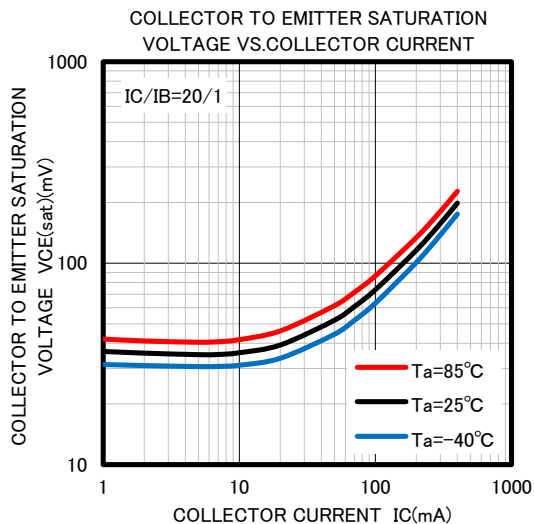
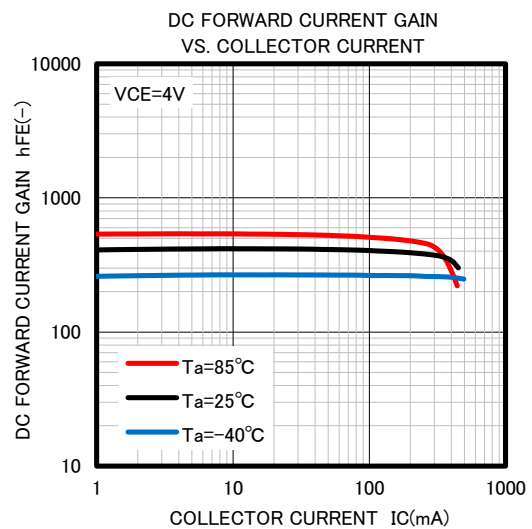
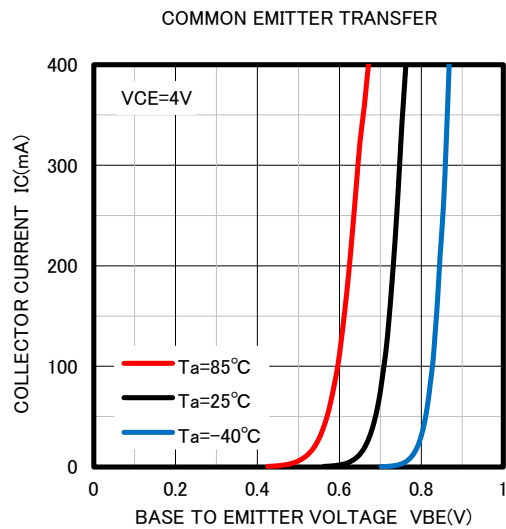
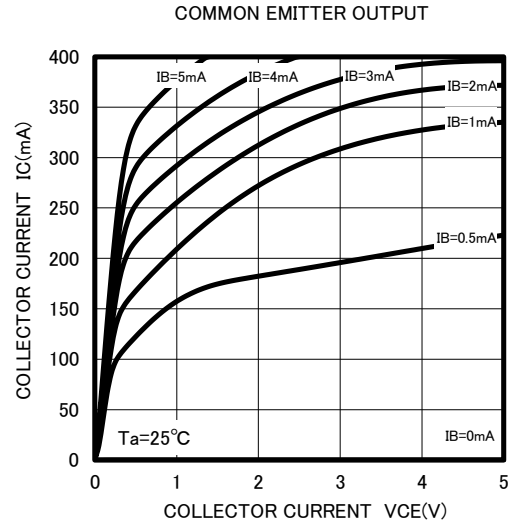
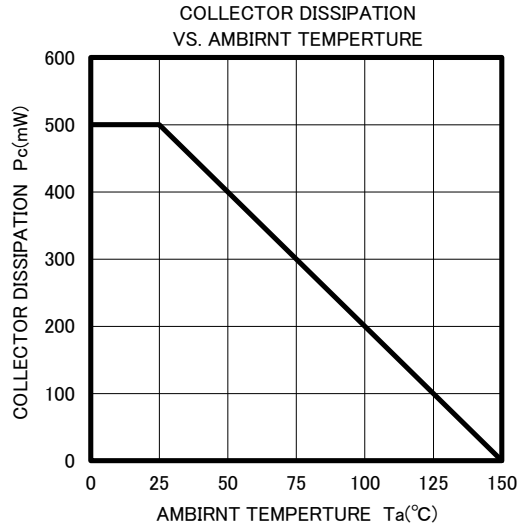
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B breakdown voltage	$I_C=10 \mu A, I_E=0mA$	55	-	-	V
$V_{(BR)EBO}$	E to B breakdown voltage	$I_E=10 \mu A, I_C=0mA$	4	-	-	V
$V_{(BR)CEO}$	C to E breakdown voltage	$I_C=100 \mu A, R_{BE}=\infty$	50	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=25V, I_E=0mA$	-	-	1	μA
I_{EBO}	Emitter cut off current	$V_{EB}=2V, I_C=0mA$	-	-	1	μA
$h_{FE} \times$	DC forward current gain	$V_{CE}=4V, I_C=100mA$	90	-	500	-
$V_{CE(sat)}$	C to E saturation voltage	$I_C=200mA, I_B=10mA$	-	0.15	0.5	V
f_T	Gain bandwidth product	$V_{CE}=6V, I_E=-10mA$	-	150	-	MHz

※) It shows h_{FE} classification at right table.

Item	D	E	F
h_{FE}	90~180	150~300	250~500

TYPICAL CHARACTERISTICS



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