

DESCRIPTION

2SC5211 is a resin sealed silicon NPN epitaxial type transistor.
It designed with high collector current and high voltage.
Complementary with 2SA1945.

FEATURE

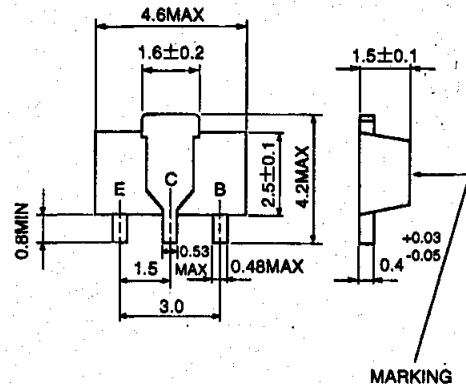
- High voltage $V_{CE0}=50V$
- High fr $f_r=150MHz$ typ
- Excellent linearity of DC forward current gain
- High collector current $I_{CM}=600mA$
- Small package for mounting

APPLICATION

For switching, small motor drive application.

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

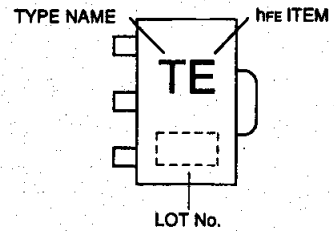
E : EMITTER
C : COLLECTOR
B : BASE
EIAJ : SC-62
JEDEC : -

Note)
The dimension without tolerance represent central value.

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V _{CB0}	Collector to Base voltage	55	V
V _{EB0}	Emitter to Base voltage	4	V
V _{CE0}	Collector to Emitter voltage	50	V
I _{CM}	Peak collector current	600	mA
I _C	Collector current	400	mA
P _C	Collector dissipation(Ta=25°C)	500	mW
T _j	Junction temperature	+150	°C
T _{stg}	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	I _C =10 μA, I _E =0	55			V
V _{(BR)EBO}	E to B break down voltage	I _E =10 μA, I _C =0	4			V
V _{(BR)CEO}	C to E break down voltage	I _C =100 μA, R _{BE} =∞	50			V
I _{CB0}	Collector cut off current	V _{CB} =25V, I _E =0			1	μA
I _{EB0}	Emitter cut off current	V _{BE} =2V, I _C =0			1	μA
h _{FE} *	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 band width product	V _{CE} =6V, I _E =-10mA		150		MHz

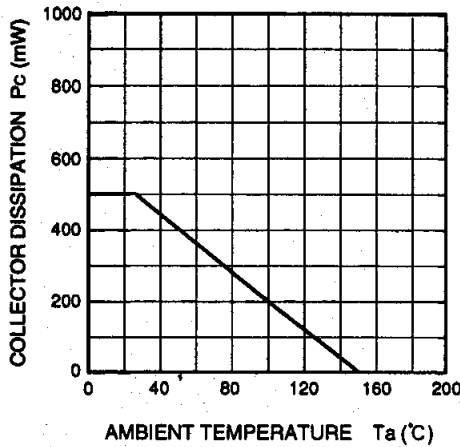
* : It shows h_{FE} classification in right table.

Marking	TD	TE	TF
h _{FE}	90 to 180	150 to 300	250 to 500

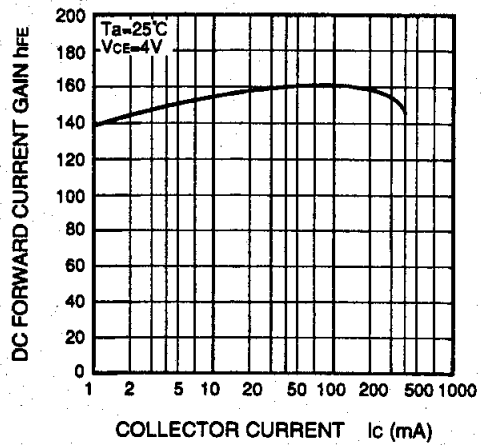
FOR GENERAL-PURPOSE HIGH CURRENT DRIVE APPLICATION
SILICON NPN EPITAXIAL TYPE

TYPICAL CHARACTERISTICS

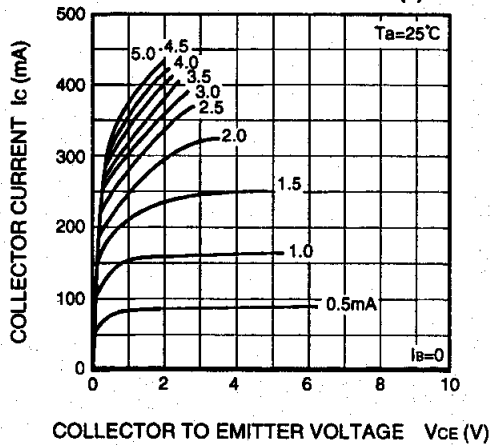
COLLECTOR DISSIPATION VS.
AMBIENT TEMPERATURE



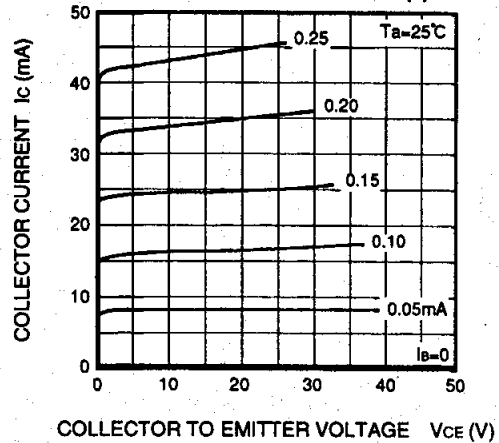
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



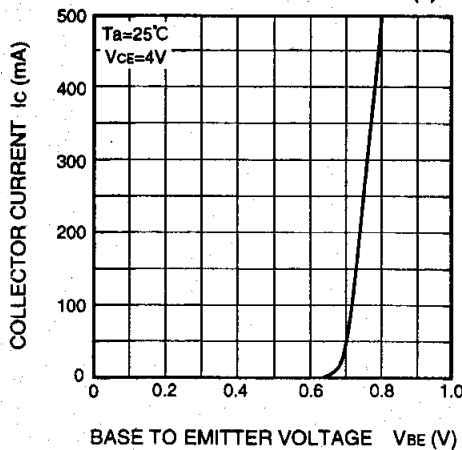
COMMON EMITTER OUTPUT (1)



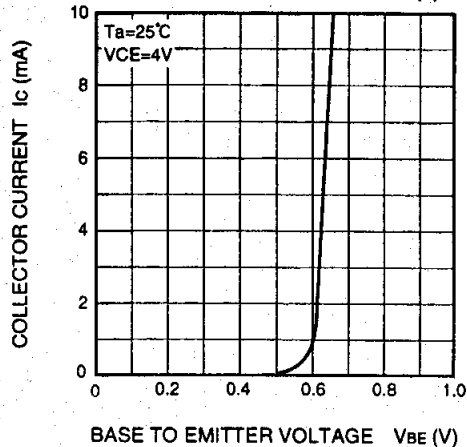
COMMON EMITTER OUTPUT (2)



COMMON EMITTER TRANSFER(1)



COMMON EMITTER TRANSFER(2)



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