# 2SD1211

### Silicon NPN epitaxial planer type

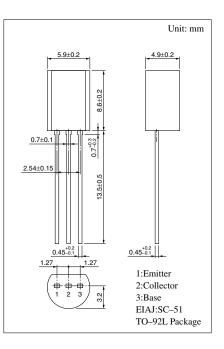
For low-frequency amplification Complementary to 2SB0987 (2SB987)

#### Features

- High collector to emitter voltage V<sub>CEO</sub>.
- Optimum for the driver-stage of a low-frequency and 40 to 60W output amplifier.

Parameter	Symbol	Ratings	Unit			
Collector to base voltage	V <sub>CBO</sub>	120	V			
Collector to emitter voltage	V <sub>CEO</sub>	120	V			
Emitter to base voltage	$V_{EBO}$	5	V			
Peak collector current	I <sub>CP</sub>	1	А			
Collector current	I <sub>C</sub>	0.5	А			
Collector power dissipation	P <sub>C</sub>	1	W			
Junction temperature	Tj	150	°C			
Storage temperature	T <sub>stg</sub>	-55 ~ +150	°C			

#### Absolute Maximum Ratings (Ta=25°C)



#### Electrical Characteristics (Ta=25°C)

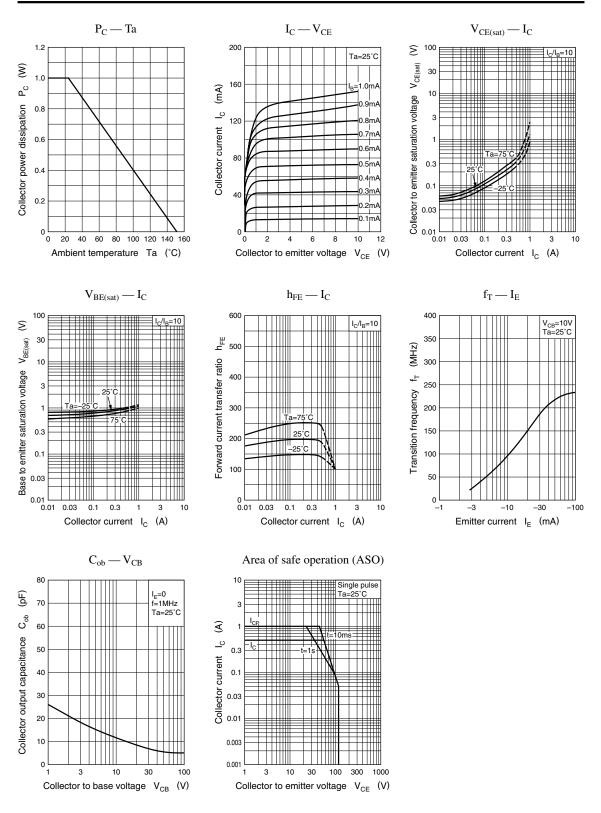
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to emitter voltage	V <sub>CEO</sub>	$I_{\rm C} = 0.1 {\rm mA},  I_{\rm B} = 0$	120			V
Emitter to base voltage	V <sub>EBO</sub>	$I_{\rm E} = 10 \mu A, I_{\rm C} = 0$	5			V
Forward current transfer ratio	h <sub>FE1</sub> *	$V_{CE} = 10V, I_C = 150mA$	130		330	
	h <sub>FE2</sub>	$V_{CE} = 5V, I_C = 500mA$	50			
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	$I_{\rm C} = 300 {\rm mA}, I_{\rm B} = 30 {\rm mA}$			1	V
Base to emitter saturation voltage	V <sub>BE(sat)</sub>	$I_{\rm C} = 300 {\rm mA}, I_{\rm B} = 30 {\rm mA}$			1.2	V
Transition frequency	f <sub>T</sub>	$V_{CB} = 10V, I_E = -50mA, f = 200MHz$		200		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = 10V, I_E = 0, f = 1MHz$			20	pF

\*hFE1 Rank classification

Rank	R	S
h <sub>FE1</sub>	130 ~ 220	185 ~ 330

Note.) The Part number in the Parenthesis shows conventional part number.

#### Transistor



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