

2SA2161J

Silicon PNP epitaxial planar type

For general amplification

Complementary to 2SC6037J

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- SS-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

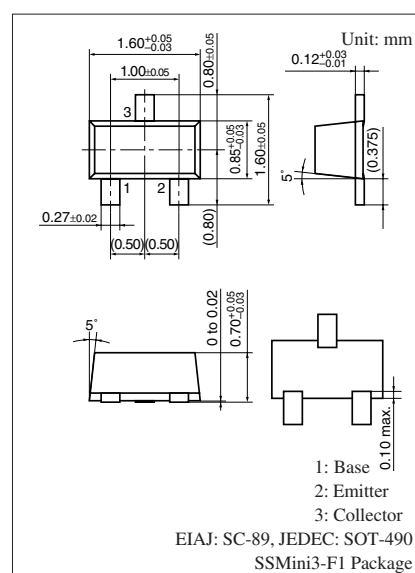
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	-15	V
Collector-emitter voltage (Base open)	V_{CEO}	-12	V
Emitter-base voltage (Collector open)	V_{EBO}	-5	V
Collector current	I_C	-500	mA
Peak collector current	I_{CP}	-1	A
Collector power dissipation	P_C	125	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

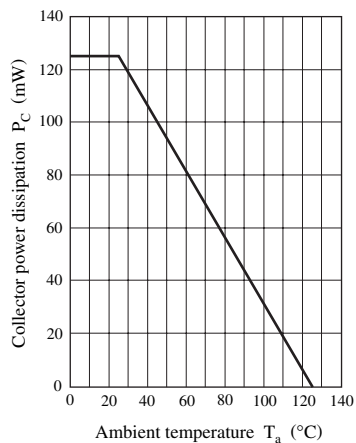
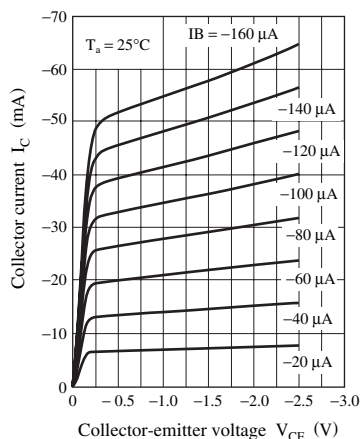
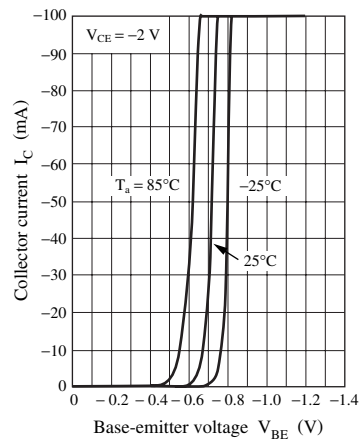
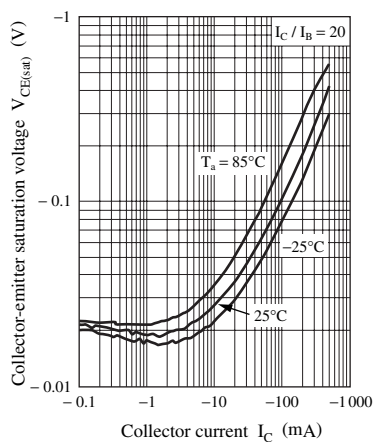
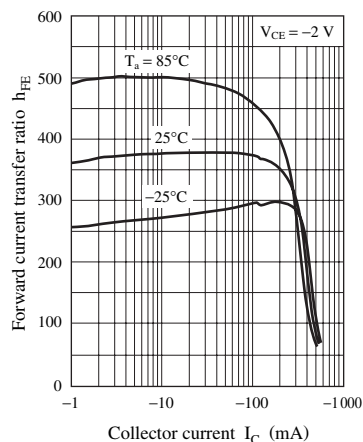
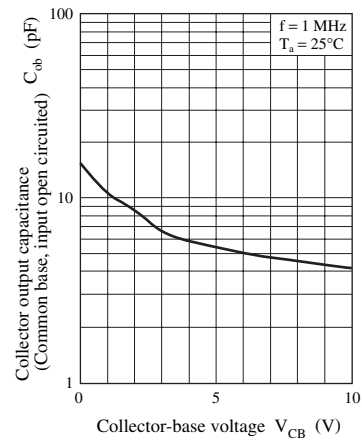
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10\ \mu\text{A}$, $I_E = 0$	-15			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -1\ \text{mA}$, $I_B = 0$	-12			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10\ \mu\text{A}$, $I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -15\ \text{V}$, $I_E = 0$			-0.1	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = -2\ \text{V}$, $I_C = -10\ \text{mA}$	270		680	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -200\ \text{mA}$, $I_B = -10\ \text{mA}$			-250	mV
Transition frequency	f_T	$V_{CB} = -2\ \text{V}$, $I_E = 10\ \text{mA}$, $f = 200\ \text{MHz}$		200		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = 10\ \text{V}$, $I_E = 0$, $f = 1\ \text{MHz}$		4.5		pF

Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.



Marking Symbol: 2U

$P_C - T_a$  $I_C - V_{CE}$  $I_C - V_{BE}$  $V_{CE(sat)} - I_C$  $h_{FE} - I_C$  $C_{ob} - V_{CB}$ 

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