

# 2SD2216J

Silicon NPN epitaxial planer type

For general amplification

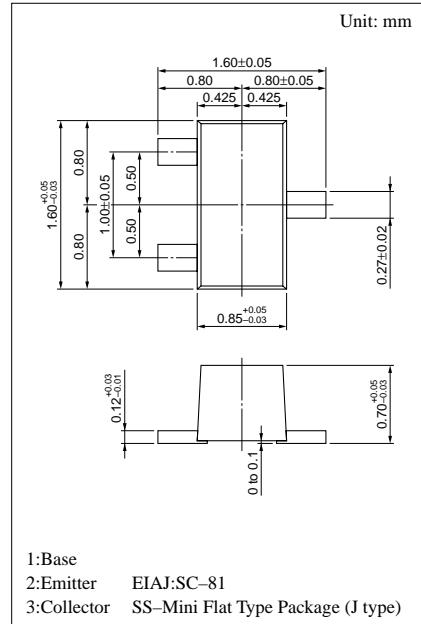
Complementary to 2SB1462J

## ■ Features

- High foward current transfer ratio  $h_{FE}$ .
- Low collector to 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 (Ta=25°C)

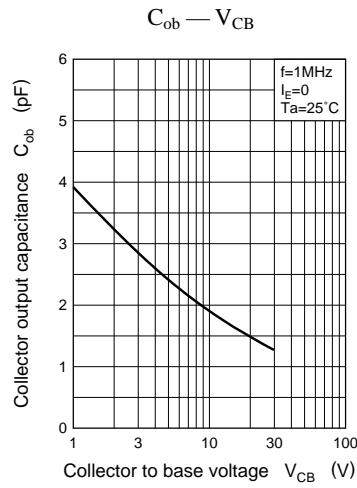
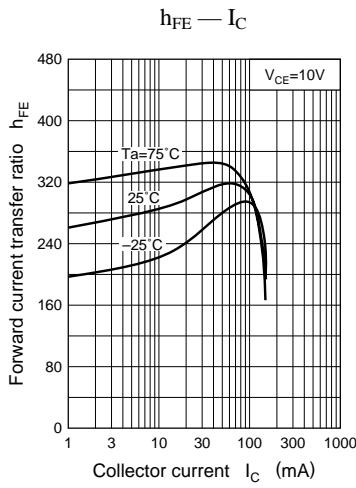
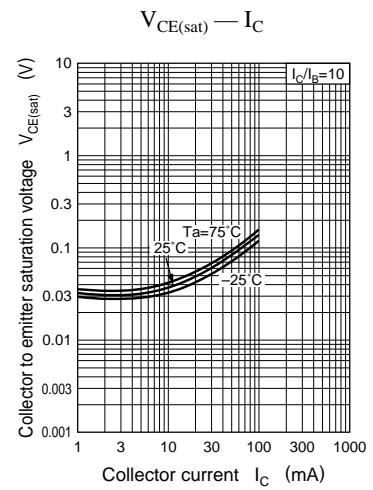
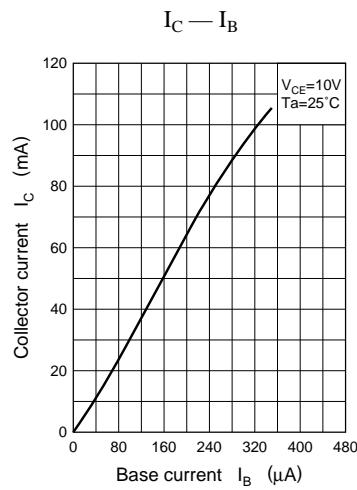
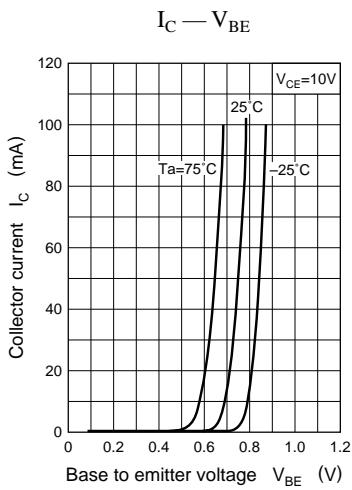
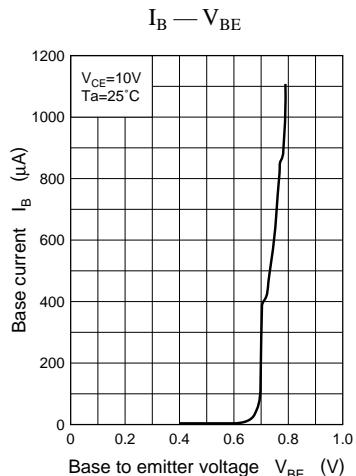
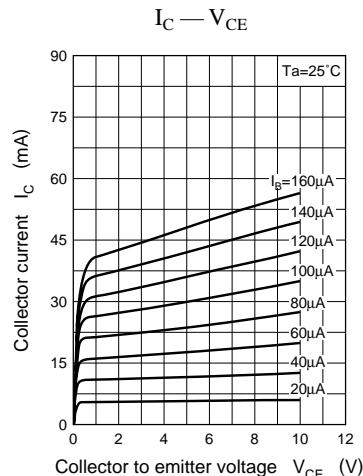
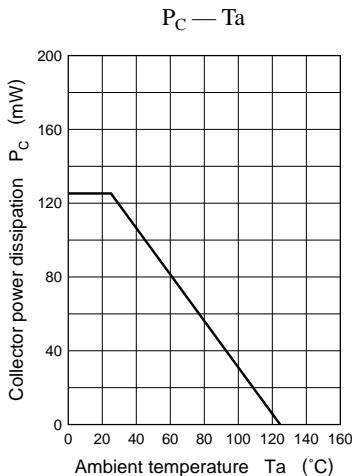
Parameter	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	60	V
Collector to emitter voltage	$V_{CEO}$	50	V
Emitter to base voltage	$V_{EBO}$	7	V
Collector current	$I_C$	100	mA
Peak collector current	$I_{CP}$	200	mA
Collector power dissipation	$P_C$	125	mW
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 ~ +125	°C



Marking symbol : Y

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

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 20V, I_E = 0$			0.1	$\mu A$
	$I_{CEO}$	$V_{CE} = 10V, I_B = 0$			100	$\mu A$
Collector to base voltage	$V_{CBO}$	$I_C = 10\mu A, I_E = 0$	60			V
Collector to emitter voltage	$V_{CEO}$	$I_C = 2mA, I_B = 0$	50			V
Emitter to base voltage	$V_{EBO}$	$I_E = 10\mu A, I_C = 0$	7			V
Forward current transfer ratio	$h_{FE1}$	$V_{CE} = 10V, I_C = 2mA$	180		390	
	$h_{FE2}$	$V_{CE} = 2V, I_C = 100mA$	90			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$		0.1	0.3	V
Transition frequency	$f_T$	$V_{CB} = 10V, I_E = -2mA, f = 200MHz$		150		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 10V, I_E = 0, f = 1MHz$		3.5		pF



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