

# ST 2SC2120

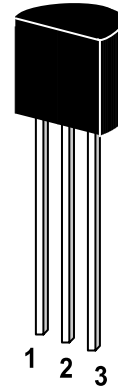
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## NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into two groups, O and Y according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



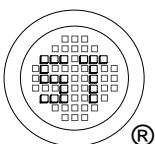
1. Emitter 2. Collector 3. Base

TO-92 Plastic Package

Weight approx. 0.19g

## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	35	V
Collector Emitter Voltage	$V_{CEO}$	30	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	800	mA
Base Current	$I_B$	160	mA
Power Dissipation	$P_{tot}$	600	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_S$	-55 to +150	$^\circ\text{C}$



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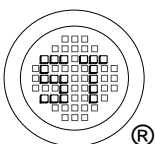
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## Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE}=1\text{V}$ , $I_C=100\text{mA}$	Current Gain Group O Y	$h_{FE}$	100	-	200	-
		$h_{FE}$	160	-	320	-
		$h_{FE}$	35	-	-	-
at $V_{CE}=1\text{V}$ , $I_C=700\text{mA}$						
Collector Cutoff Current at $V_{CB}=35\text{V}$	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	
Emitter Cutoff Current at $V_{EB}=5\text{V}$	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	
Collector Emitter Saturation Voltage at $I_C=500\text{mA}$ , $I_B=20\text{mA}$	$V_{CE(sat)}$	-	-	0.5	V	
Transition Frequency at $V_{CE}=5\text{V}$ , $I_C=10\text{mA}$	$f_T$	-	120	-	MHz	
Base Emitter Voltage at $I_C=10\text{mA}$ , $V_{CE}=1\text{V}$	$V_{BE}$	0.5	-	0.8	V	
Collector Output Capacitance at $V_{CB}=10\text{V}$ , $f=1\text{MHz}$	$C_{OB}$	-	13	-	pF	
Collector Emitter Breakdown Voltage at $I_C=10\text{mA}$	$V_{CEO}$	30	-	-	V	



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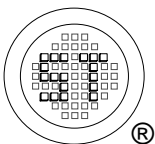
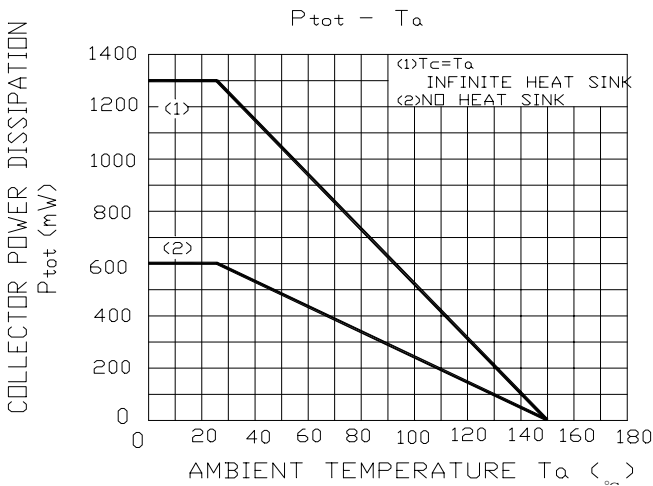
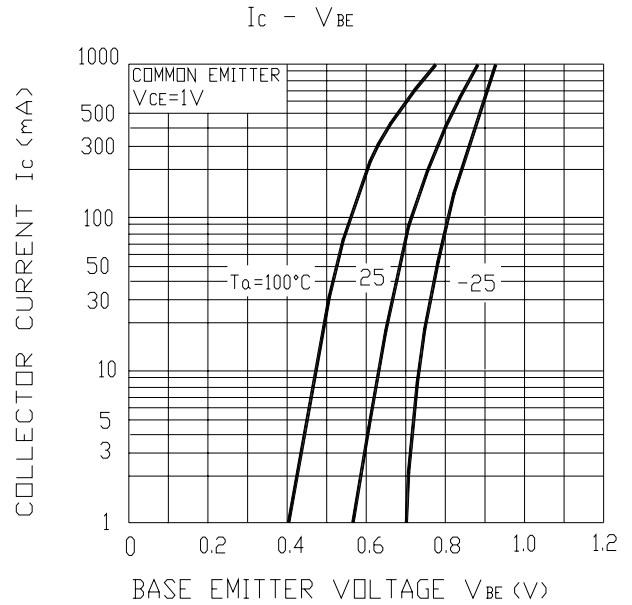
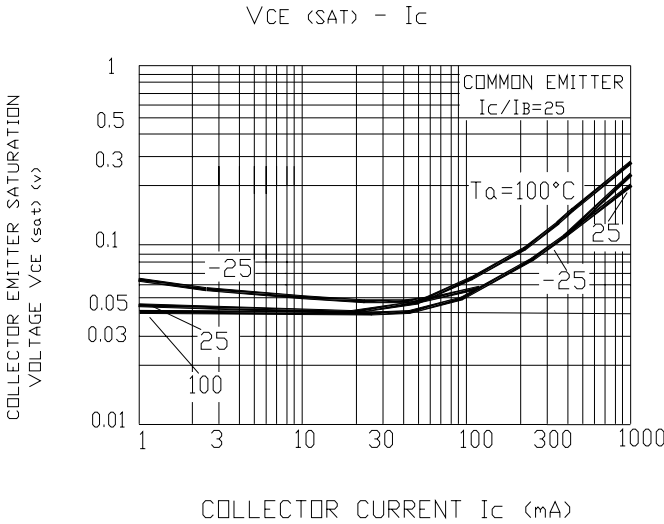
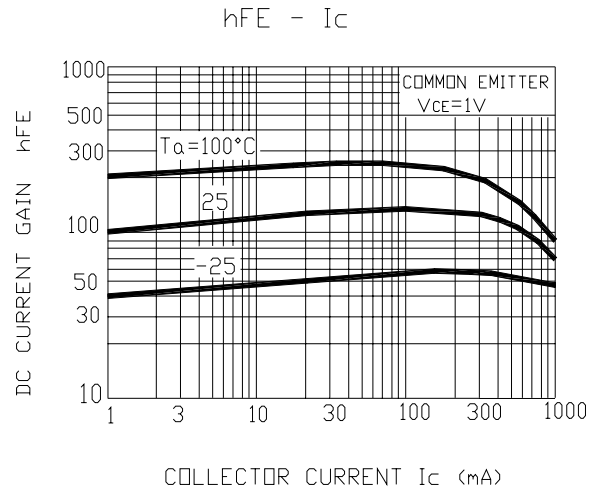
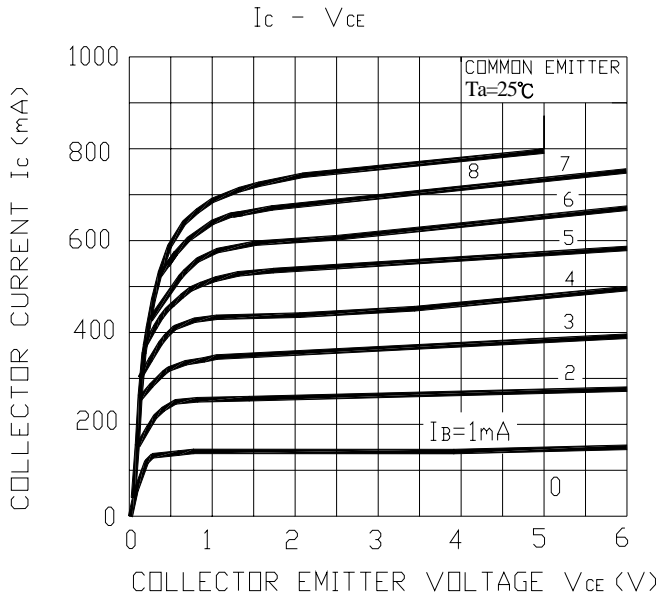


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