

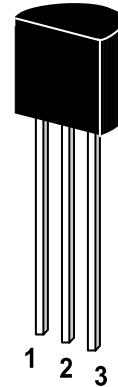
ST 2SC2120

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.

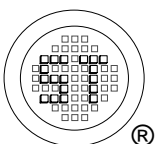


1. Emitter 2. Collector 3. Base

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	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



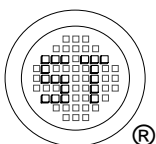
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Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	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	μA	
Emitter Cutoff Current at $V_{EB}=5\text{V}$	I_{EBO}	-	-	0.1	μA	
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	



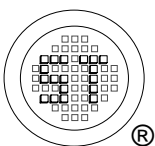
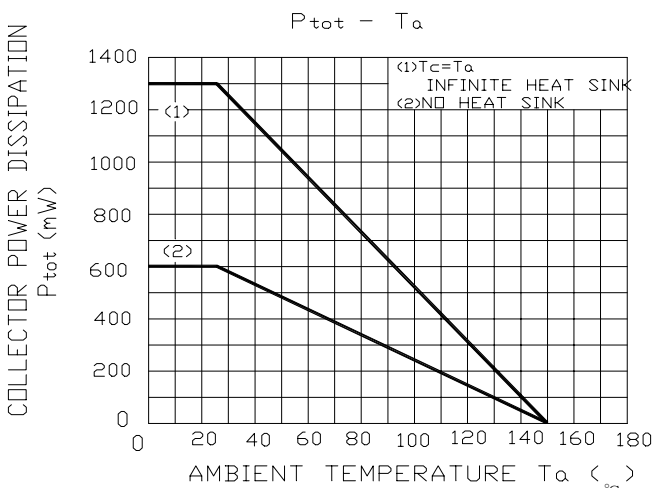
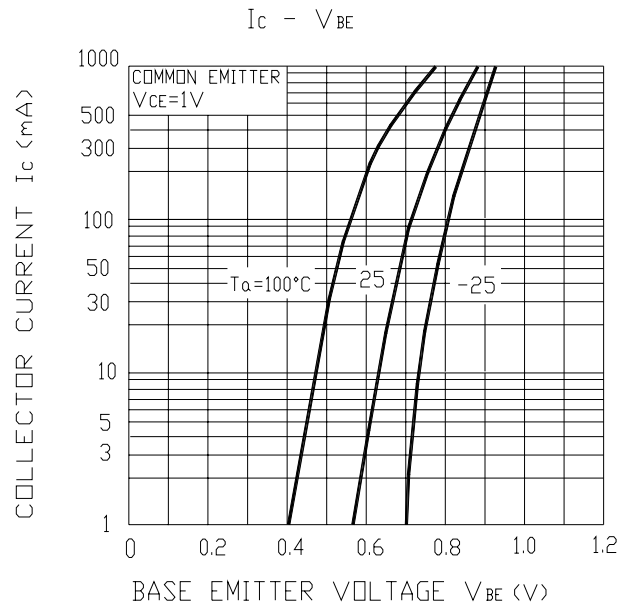
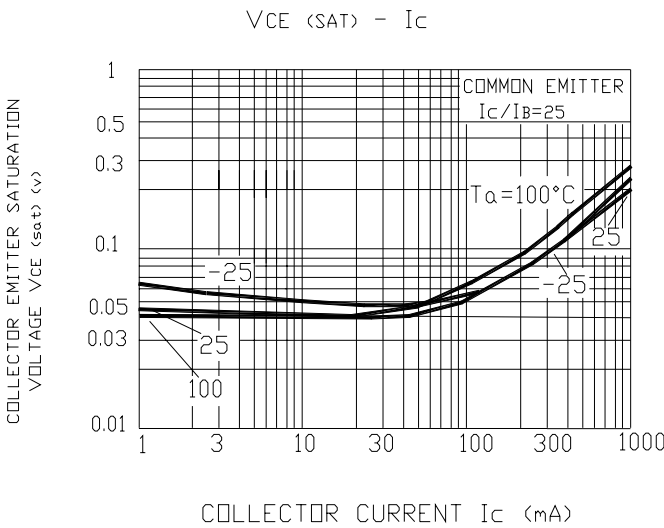
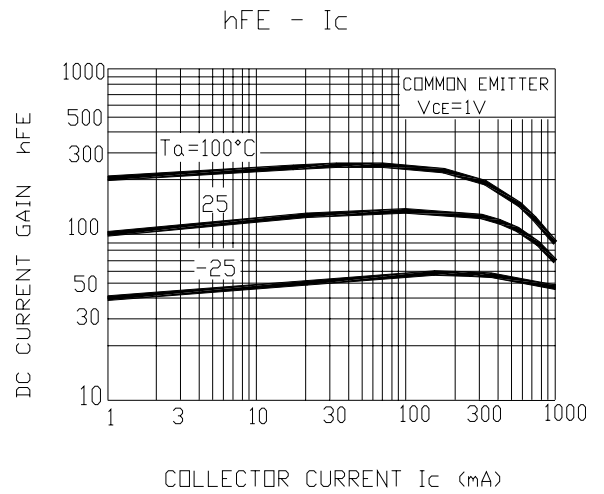
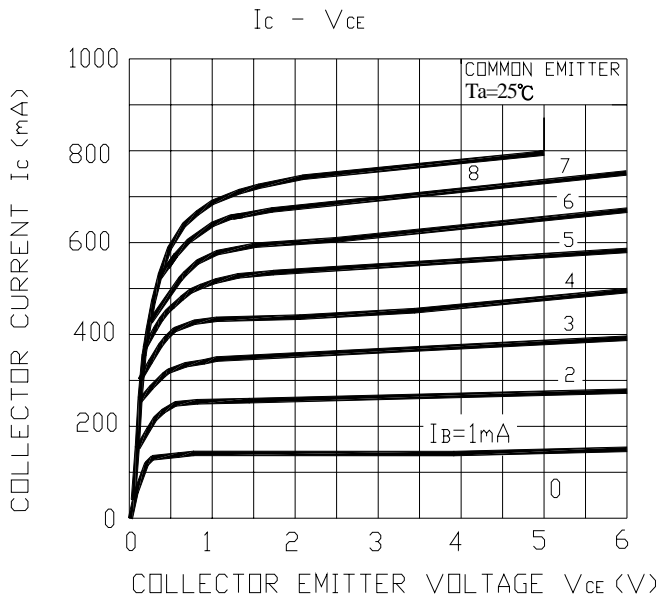
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