

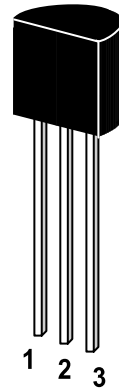
ST 2SA1300

PNP Silicon Epitaxial Planar Transistor

for strobo flash and medium power amplifier applications.

The transistor is subdivided into three groups, Y, G and L, according to its DC current gain.

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



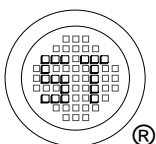
1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19g

Absolute Maximum Ratings (Ta=25°C)

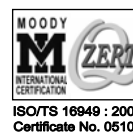
		Symbol	Value	Unit
Collector Base Voltage		$-V_{CBO}$	20	V
Collector Emitter Voltage		$-V_{CES}$	20	V
		$-V_{CEO}$	10	
Emitter Base Voltage		$-V_{EBO}$	6	V
Collector Current	Pulsed(Note 1)	$-I_{CP}$	5	A
	DC	$-I_C$	2	A
Base Current		$-I_B$	0.2	A
Power Dissipation		P_{tot}	750	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_S	-55 to +150	°C

Note 1: Pulse Width=10ms (Max.), Duty Cycle=30%(Max.)



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ISO/TS 16949 : 2002
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ISO 14001:2004
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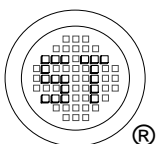
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Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}=1\text{V}$, $-I_C=0.5\text{A}$	Y	h_{FE}	140	-	280	-
	G	h_{FE}	200	-	400	-
	L	h_{FE}	300	-	600	-
at $-V_{CE}=1\text{V}$, $-I_C=4\text{A}$		h_{FE}	60	120	-	-
Collector Cutoff Current at $-V_{CB}=20\text{V}$		$-I_{CBO}$	-	-	0.1	μA
Emitter Cutoff Current at $-V_{EB}=6\text{V}$		$-I_{EBO}$	-	-	0.1	μA
Collector-Emitter Breakdown Voltage at $-I_C=10\text{mA}$		$-V_{(BR)CEO}$	10	-	-	V
Emitter-Base Breakdown Voltage at $-I_E=1\text{mA}$		$-V_{(BR)EBO}$	6	-	-	V
Collector Output Capacitance at $-V_{CB}=10\text{V}$, $f=1.0\text{MHz}$		Cob	-	50	-	pF
Collector to Emitter Saturation Voltage at $-I_C=2\text{A}$, $-I_B=50\text{mA}$		$-V_{CE(sat)}$	-	0.2	0.5	V
Base-Emitter Voltage at $-V_{CE}=1\text{V}$, $-I_C=2\text{A}$		$-V_{BE}$	-	0.83	1.5	V
Transition Frequency at $-V_{CE}=1\text{V}$, $-I_C=0.5\text{A}$		f_T	-	140	-	MHz



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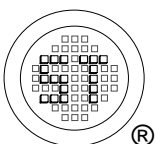
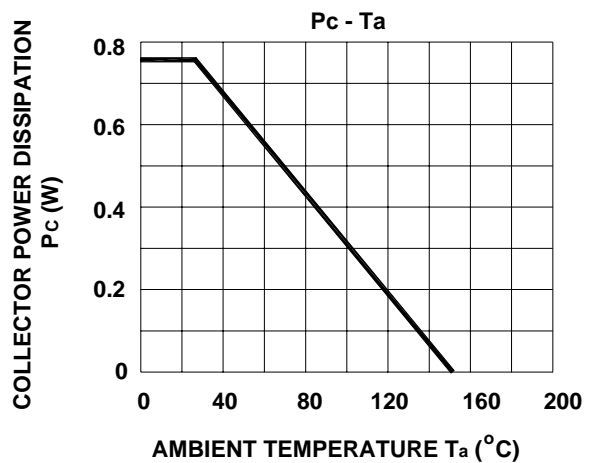
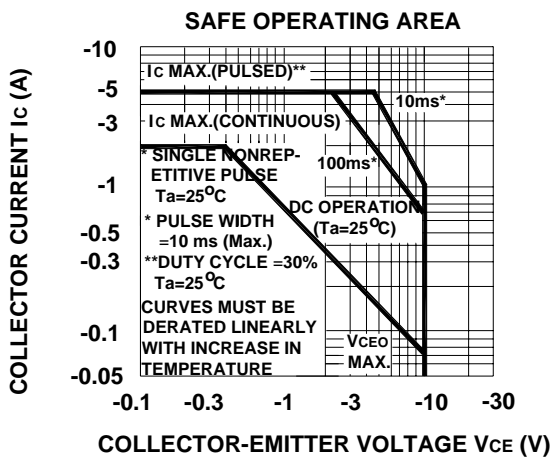
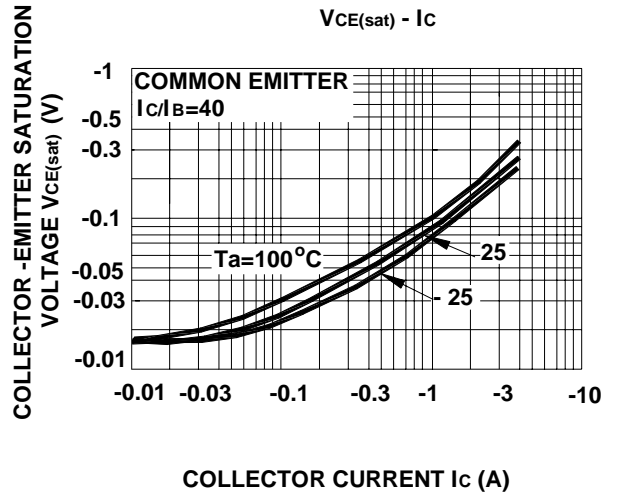
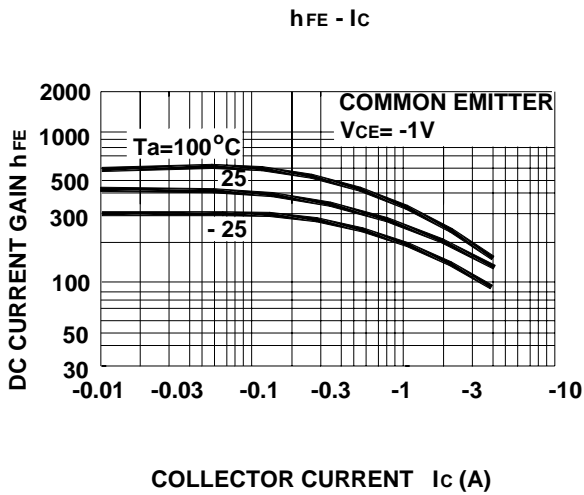
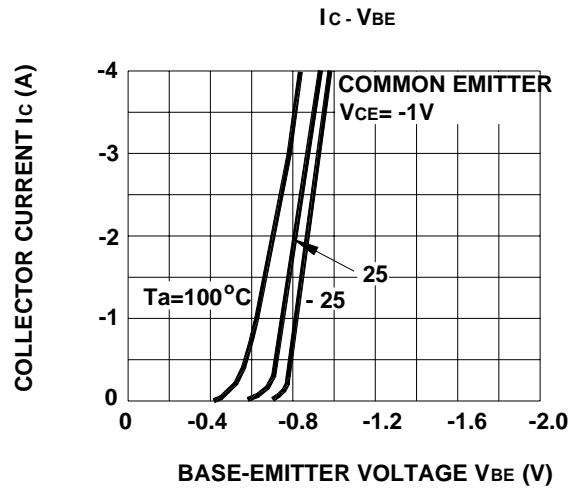
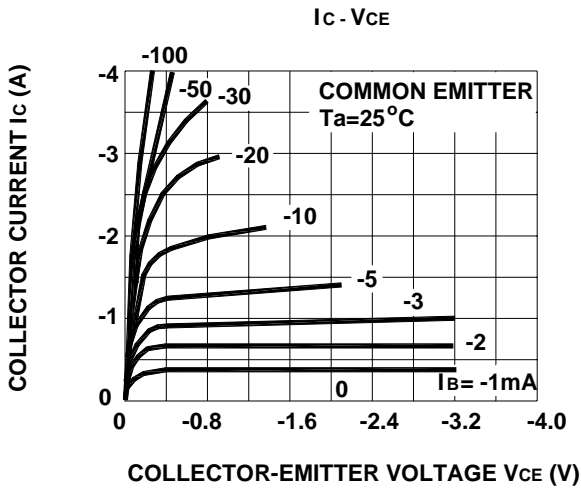
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