

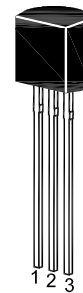
# ST 2SA952

## PNP Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into three group, M, L and K according to its DC current gain.

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



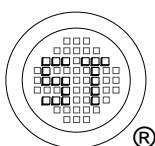
1. Emitter 2. Collector 3. Base  
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CB0}$	30	V
Collector Emitter Voltage	$-V_{CEO}$	25	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	700	mA
Base Current	$-I_B$	150	mA
Power Dissipation	$P_{tot}$	600	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit	
DC Current Gain at $-V_{CE} = 1\text{ V}$ , $-I_C = 100\text{ mA}$  at $-V_{CE} = 1\text{ V}$ , $-I_C = 700\text{ mA}$	Current Gain Group M L K	$h_{FE}$	90	180	-
		$h_{FE}$	135	270	-
		$h_{FE}$	200	400	-
		$h_{FE}$	50	-	-
Collector Base Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CB0}$	-	100	nA	
Emitter Base Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	100	nA	
Collector Emitter Saturation Voltage at $-I_C = 700\text{ mA}$ , $-I_B = 70\text{ mA}$	$-V_{CE(sat)}$	-	0.6	V	
Base Emitter Saturation Voltage at $-I_C = 700\text{ mA}$ , $-I_B = 70\text{ mA}$	$-V_{BE(sat)}$	-	1.2	V	
Base Emitter Voltage at $-V_{CE} = 6\text{ V}$ , $-I_C = 10\text{ mA}$	$-V_{BE}$	0.6	0.7	V	
Gain Bandwidth Product at $-V_{CE} = 6\text{ V}$ , $-I_E = 10\text{ mA}$	$f_T$	50	-	MHz	
Collector to Base Capacitance at $-V_{CB} = 6\text{ V}$ , $f = 1\text{ MHz}$	$C_{OB}$	-	40	pF	



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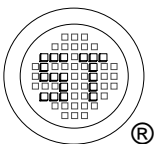
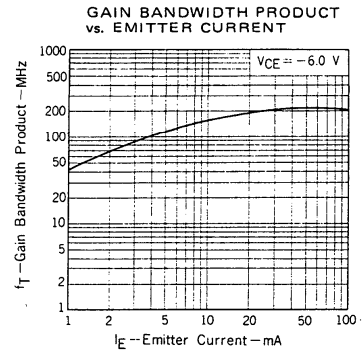
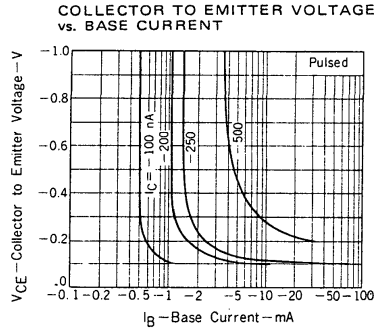
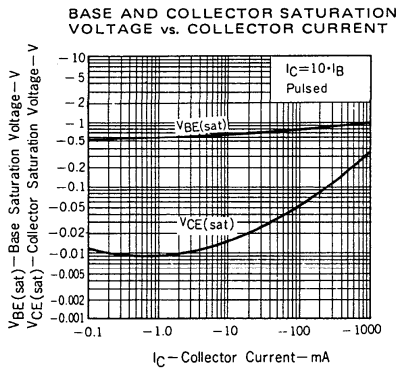
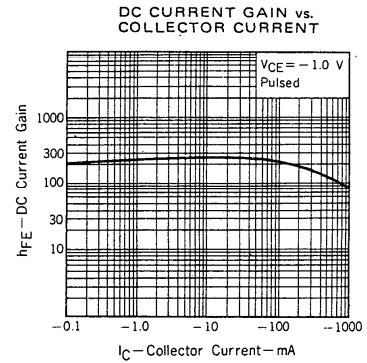
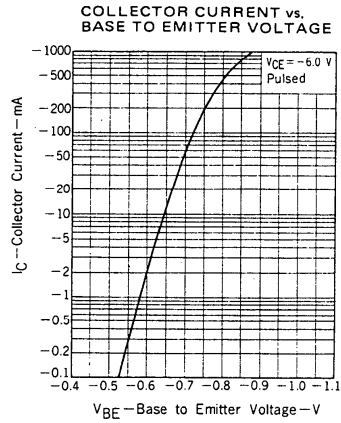
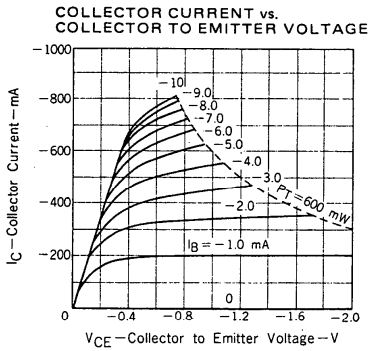
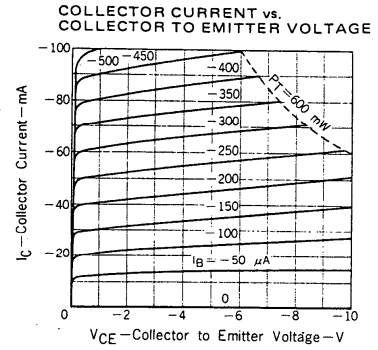
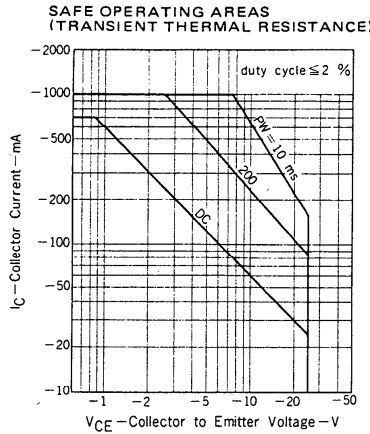
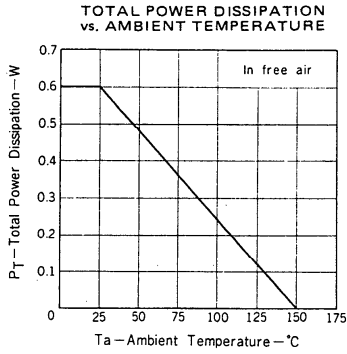
ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
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