

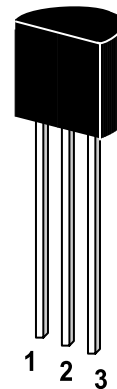
# ST 2SB564

## PNP Silicon Epitaxial Planar Transistor

for use in driver and output stages of audio frequency amplifiers.

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

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

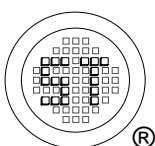


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package  
Weight approx. 0.19g

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

	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	30	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	25	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current	$-I_{\text{C}}$	1	A
Base Current	$-I_{\text{B}}$	100	mA
Power Dissipation	$P_{\text{tot}}$	1	W
Thermal Resistance	$R_{\theta\text{JA}}$	125	$^{\circ}\text{C/W}$
Junction Temperature	$T_{\text{j}}$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{\text{s}}$	-55 to +150	$^{\circ}\text{C}$



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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



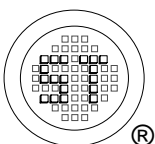
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## Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}=1\text{V}$ , $-I_C=100\text{mA}$  Current Gain Group M L K  at $-V_{CE}=1\text{V}$ , $-I_C=1\text{A}$	$h_{FE}$	90	-	180	-
	$h_{FE}$	135	-	270	-
	$h_{FE}$	200	-	400	-
	$h_{FE}$	50	100	-	-
Collector Cutoff Current at $-V_{CB}=30\text{V}$	$-I_{CBO}$	-	-	100	nA
Emitter Cutoff Current at $-V_{EB}=5\text{V}$	$-I_{EBO}$	-	-	100	nA
Base Emitter Saturation Voltage at $-I_C=1.0\text{A}$ , $-I_B=100\text{mA}$	$-V_{BE(sat)}$	-	1.0	1.2	V
Collector Emitter Saturation Voltage at $-I_C=1.0\text{A}$ , $-I_B=100\text{mA}$	$-V_{CE(sat)}$	-	0.25	0.35	V
Base Emitter Voltage at $-V_{CE}=6.0\text{V}$ , $-I_C=10\text{mA}$	$-V_{BE}$	0.6	0.64	0.7	V
Gain Bandwidth Product at $-V_{CE}=6.0\text{V}$ , $-I_E=10\text{mA}$	$f_T$	-	110	-	MHz
Collector Base Capacitance at $-V_{CB}=6\text{V}$ , $f=1\text{MHz}$	$C_{OB}$	-	36	-	pF



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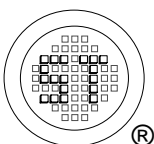
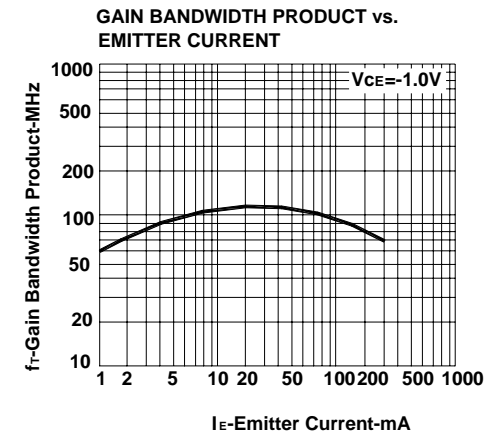
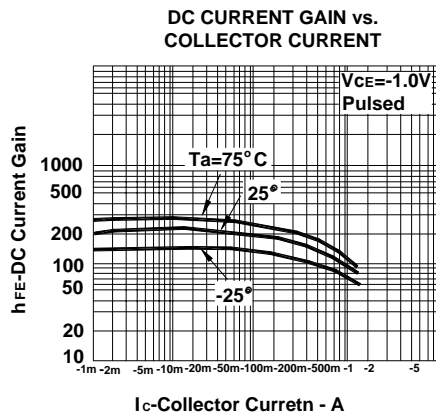
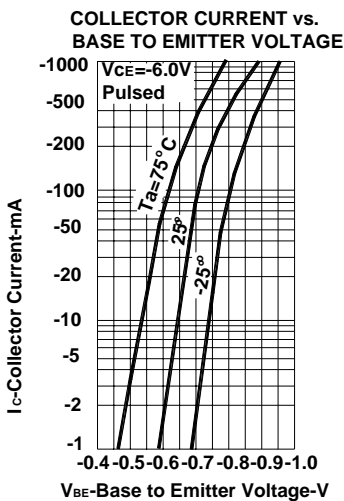
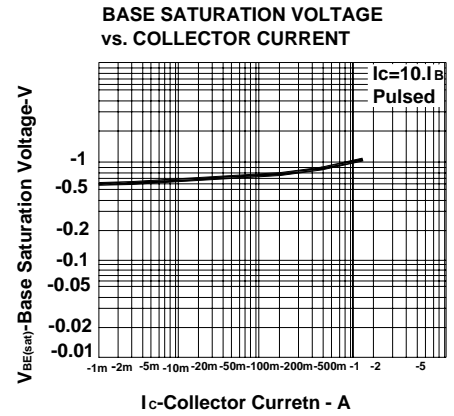
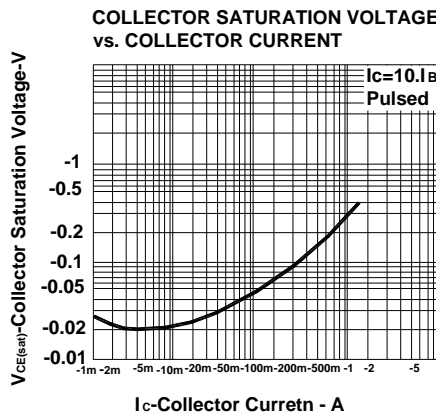
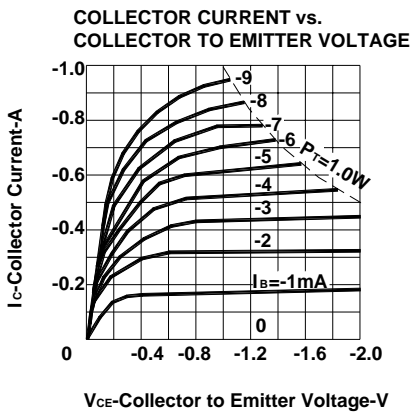
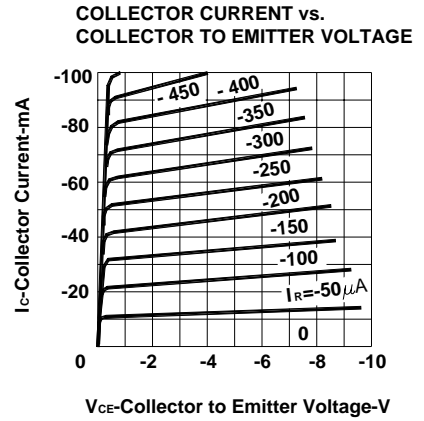
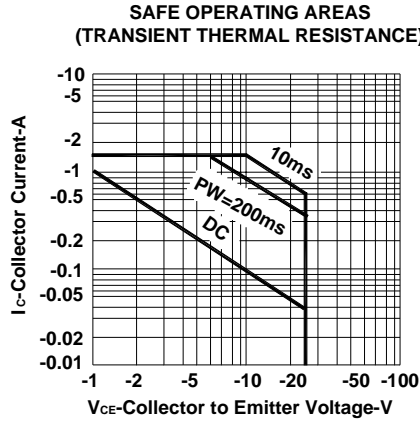
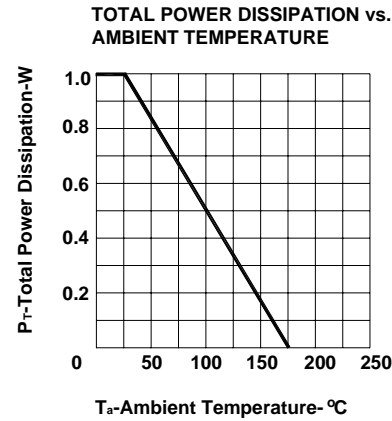
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## TYPICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)



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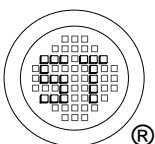
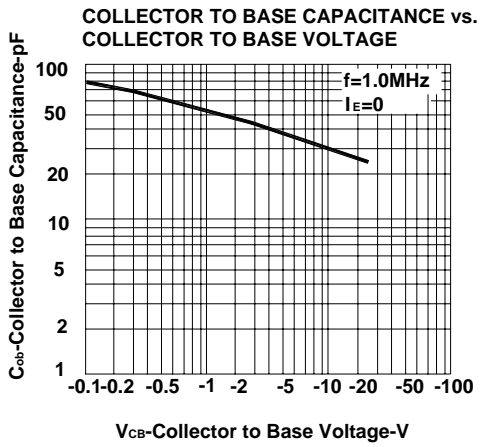


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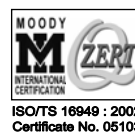


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