

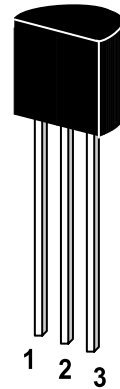
# ST 2SC2002

## NPN Silicon Epitaxial Planar Transistor

for use in driver stage of high voltage audio equipments.

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.

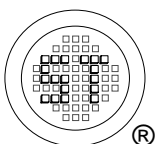


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package  
Weight approx. 0.19g

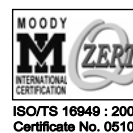
## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	60	V
Collector Emitter Voltage	$V_{CEO}$	60	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	300	mA
Base Current	$I_B$	60	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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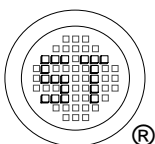


Dated : 08/07/2005

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

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=1\text{V}$ , $I_C=50\text{mA}$					
Current Gain Group M	$h_{FE}$	90	-	180	-
L	$h_{FE}$	135	-	270	-
K	$h_{FE}$	200	-	400	-
at $V_{CE}=2\text{V}$ , $I_C=300\text{mA}$	$h_{FE}$	30	80	-	-
Base Emitter Voltage at $I_C=10\text{mA}$ , $V_{CE}=6\text{V}$	$V_{BE}$	600	645	700	mV
Emitter Cutoff Current at $V_{EB}=5\text{V}$	$I_{EBO}$	-	-	100	nA
Collector Cutoff Current at $V_{CB}=60\text{V}$	$I_{CBO}$	-	-	100	nA
Collector Saturation Voltage at $I_C=300\text{mA}$ , $I_B=30\text{mA}$	$V_{CE(sat)}$	-	0.15	0.6	V
Base Saturation Voltage at $I_C=300\text{mA}$ , $I_B=30\text{mA}$	$V_{BE(sat)}$	-	0.86	1.2	V
Gain Bandwidth Product at $V_{CE}=6\text{V}$ , $I_E=-10\text{mA}$	$f_T$	50	140	-	MHz
Collector to Base Capacitance at $V_{CB}=6\text{V}$ , $f=1\text{MHz}$	$C_{OB}$	-	7.0	15	pF



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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



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