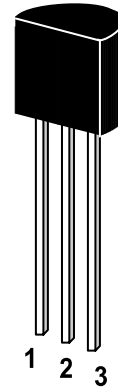


# ST 2SC1740

**NPN Silicon Epitaxial Planar Transistor**  
for switching and AF amplifier applications.

The transistor is subdivided into four groups Q, R, S and E. according to its DC current gain.

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

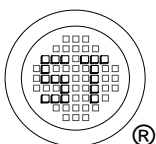


1. Emitter 2. Collector 3. Base

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	$V_{CEO}$	50	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	150	mA
Power Dissipation	$P_{tot}$	300	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_S$	-55 to +150	$^\circ\text{C}$



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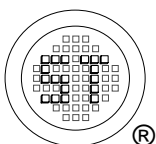


Dated : 07/12/2002

# ST 2SC1740

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

	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE}=6\text{V}$ , $I_C=1\text{mA}$	Q	$h_{FE}$	120	-	270	-
	R	$h_{FE}$	180	-	390	-
	S	$h_{FE}$	270	-	560	-
	E	$h_{FE}$	390	-	820	-
Collector Base Breakdown Voltage at $I_C=50\mu\text{A}$	$V_{(BR)CBO}$	60	-	-	V	
Collector Emitter Breakdown Voltage at $I_C=1\text{mA}$	$V_{(BR)CEO}$	50	-	-	V	
Emitter Base Breakdown Voltage at $I_E=50\mu\text{A}$	$V_{(BR)EBO}$	5	-	-	V	
Collector Cutoff Current at $V_{CB}=60\text{V}$	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	
Emitter Cutoff Current at $V_{EB}=5\text{V}$	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	
Collector Saturation Voltage at $I_C=50\text{mA}$ , $I_B=5\text{mA}$	$V_{CE(sat)}$	-	-	0.4	V	
Gain Bandwidth Product at $V_{CE}=12\text{V}$ , $I_C=2\text{mA}$	$f_T$	-	180	-	MHz	
Output Capacitance at $V_{CB}=12\text{V}$ , $f=1\text{MHz}$	$C_{OB}$	-	2	3.5	pF	



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Dated : 07/12/2002