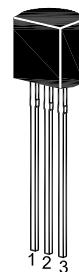


# 2SC1393

## NPN Silicon Epitaxial Planar Transistor TV VHF TUNER RF AMPLIFIER (FORWARD AGC)

The transistor is subdivided into three group, R, O and Y, 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 ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	30	V
Collector Emitter Voltage	$V_{CEO}$	30	V
Emitter Base Voltage	$V_{EBO}$	4	V
Collector Current	$I_C$	20	mA
Collector Dissipation	$P_{tot}$	250	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 10 \text{ V}$ , $I_C = 2 \text{ mA}$	$h_{FE}$	40	-	80	-
	$h_{FE}$	60	-	140	-
	$h_{FE}$	90	-	180	-
Collector Base Cutoff Current at $V_{CB} = 20 \text{ V}$	$I_{CBO}$	-	-	100	nA
Collector Base Breakdown Voltage at $I_C = 10 \mu\text{A}$	$V_{(BR)CBO}$	30	-	-	V
Collector Emitter Breakdown Voltage at $I_C = 5 \text{ mA}$	$V_{(BR)CEO}$	30	-	-	V
Emitter Base Breakdown Voltage at $I_E = 10 \mu\text{A}$	$V_{(BR)EBO}$	4	-	-	V
Current Gain Bandwidth Product at $V_{CE} = 10 \text{ V}$ , $I_C = 3 \text{ mA}$	$f_T$	-	700	-	MHz
Reverse Transfer Capacitance at $V_{CB} = 10 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{re}$	-	-	0.5	pF

