

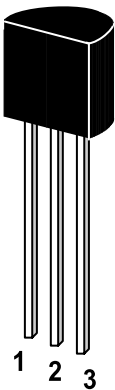
ST 2SC1393

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.

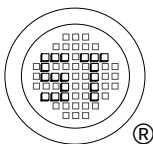


1. Emitter 2. Collector 3. Base

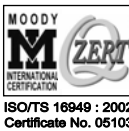
TO-92 Plastic Package
Weight approx. 0.19g

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

	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_{S}	-55 to +150	$^{\circ}\text{C}$



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listed on the Hong Kong Stock Exchange, Stock Code: 724)

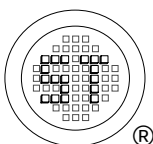


Dated : 16/06/2004

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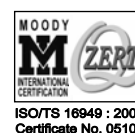
Characteristics at $T_{amb}=25^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=10\text{V}$, $I_C=2\text{mA}$	R O Y h_{FE} h_{FE} h_{FE}	40 60 90	- - -	80 140 180	-
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
Collector Cutoff Current at $V_{CB}=20\text{V}$	I_{CBO}	-	-	0.1	μA
AGC Current I_E at $G_{pe}=-30\text{dB}$, $f=200\text{MHz}$	I_{AGC}	-	-10	-12	mA
Reverse Transfer Capacitance at $V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{re}	-	0.35	0.5	pF
Current Gain Bandwidth Product at $V_{CE}=10\text{V}$, $I_C=3\text{mA}$	f_T	400	700	-	MHz
Power Gain at $V_{CE}=10\text{V}$, $f=200\text{MHz}$, $R_S=50\Omega$, $I_E=-3\text{mA}$	G_{pe}	20	24	-	dB
Noise Figure at $V_{CE}=10\text{V}$, $I_E=-3\text{mA}$ $f=200\text{MHz}$, $R_S=50\Omega$	NF	-	2.0	3.0	dB



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