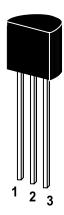
## **NPN Silicon Epitaxial Planar Transistor**

RF amplifier applications.

The transistor is subdivided into three groups, 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<sub>a</sub> = 25°C)

	Symbol	Value	Unit
Collector Base Voltage	V <sub>CBO</sub>	30	V
Collector Emitter Voltage	V <sub>CEO</sub>	20	V
Emitter Base Voltage	V <sub>EBO</sub>	4	V
Collector Current	I <sub>C</sub>	20	mA
Collector Dissipation	P <sub>tot</sub>	500	mW
Junction Temperature	Tj	150	°C
Storage Temperature Range	Ts	-55 to +150	°C







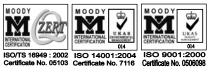
## Characteristics at $T_{amb}$ =25 $^{\rm o}$ C

		Symbol	Min.	Тур.	Max.	Unit
DC Current Gain						
at V <sub>CE</sub> =6V, I <sub>C</sub> =1mA	R	$h_{FE}$	40	-	80	-
	0	$h_{FE}$	70	-	140	-
	Υ	$h_{FE}$	120	-	240	-
Collector Base Breakdown Voltage						
at I <sub>C</sub> =10μA		$V_{\text{CBO}}$	30	-	-	V
Collector Emitter Breakdown Voltage						
at I <sub>C</sub> =5mA		$V_{\text{CEO}}$	20	-	-	V
Emitter Base Breakdown Voltage						
at I <sub>E</sub> =10μA		$V_{EBO}$	4	-	-	V
Collector Cutoff Current						
at V <sub>CB</sub> =30V		$I_{CBO}$	-	-	0.5	μΑ
Emitter Cutoff Current						
at V <sub>EB</sub> =4V		$I_{EBO}$	-	-	0.5	μΑ
Collector Emitter Saturation Voltage						
at I <sub>C</sub> =10mA, I <sub>B</sub> =1mA		$V_{\text{CE(sat)}}$	-	-	0.3	V
Transition Frequency						
at V <sub>CE</sub> =6V, I <sub>E</sub> =-1mA		$f_T$	-	550	-	MHz
Collector Output Capacitance						
at V <sub>CB</sub> =6V, f=1MHz		$C_OB$	-	1.4	-	pF









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