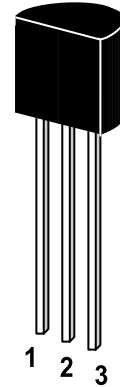


**NPN Silicon Epitaxial Planar Transistor**

for low-frequency power and stroboscope applications.

The transistor is subdivided into three groups P, Q and R, 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

**Features**

- Low collector-emitter saturation voltage
- Satisfactory operation performances at high efficiency with the low voltage power supply

**Absolute Maximum Ratings (Ta=25°C)**

	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	40	V
Collector Emitter Voltage	$V_{CEO}$	20	V
Emitter Base Voltage	$V_{EBO}$	7	V
Peak Collector Current	$I_{CP}$	8	A
Collector Current	$I_C$	5	A
Power Dissipation	$P_{tot}$	750	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_S$	-55 to +150	°C

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

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=2\text{V}$ , $I_C=0.5\text{A}$	P	$h_{FE}$	120	-	250	-
	Q	$h_{FE}$	230	-	380	-
	R	$h_{FE}$	340	-	600	-
		$h_{FE}$	150	-	-	-
at $V_{CE}=2\text{V}$ , $I_C=1\text{A}$						
Collector Cutoff Current at $V_{CB}=10\text{V}$		$I_{CBO}$	-	-	0.1	$\mu\text{A}$
Collector Cutoff Current at $V_{CE}=10\text{V}$		$I_{CEO}$	-	-	1.0	$\mu\text{A}$
Emitter Cutoff Current at $V_{EB}=7\text{V}$		$I_{EBO}$	-	-	0.1	$\mu\text{A}$
Collector Output Capacitance at $V_{CB}=20\text{V}$ , $f=1\text{MHz}$ (Common base, input open circuited)		$C_{ob}$	-	26	50	$\text{pF}$
Collector to Emitter Voltage at $I_C=1\text{mA}$		$V_{CEO}$	20	-	-	$\text{V}$
Emitter to Base Voltage at $I_E=10\mu\text{A}$		$V_{EBO}$	7	-	-	$\text{V}$
Collector to Emitter Saturation Voltage at $I_C=3\text{A}$ , $I_B=0.1\text{A}$		$V_{CE(sat)}$	-	0.28	1	$\text{V}$
Current Gain Bandwidth Product at $V_{CB}=6\text{V}$ , $I_E=-50\text{mA}$ , $f=200\text{MHz}$		$f_T$	-	150	-	$\text{MHz}$

