

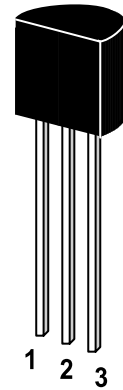
2SD966



NPN Silicon Epitaxial Planar Transistor
for low-frequency power amplification and stroboscope.

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

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

	Symbol	Value	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	7	V
Peak Collector Current	I_{CP}	8	A
Collector Current	I_{C}	5	A
Collector Power Dissipation	P_{C}	1	W
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{s}	-55 to +150	$^\circ\text{C}$

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 $V_{CE}=2\text{V}$, $I_C=2\text{A}$						
Collector Cutoff Current at $V_{CB}=10\text{V}$	I_{CBO}	-	-	0.1	μA	
Emitter Cutoff Current at $V_{EB}=7\text{V}$	I_{EBO}	-	-	0.1	μA	
Collector Output Capacitance at $V_{CB}=20\text{V}$, $f=1.0\text{MHz}$	Cob	-	-	50	pF	
Collector to Emitter Voltage at $I_C=1\text{mA}$	V_{CEO}	20	-	-	V	
Emitter to Base Voltage at $I_E=10\mu\text{A}$	V_{EBO}	7	-	-	V	
Collector to Emitter Saturation Voltage at $I_C=3\text{A}$, $I_B=0.1\text{A}$	$V_{CE(sat)}$	-	-	1	V	
Transition Frequency at $V_{CB}=6\text{V}$, $I_E=-50\text{mA}$, $f=200\text{MHz}$	f_T	-	150	-	MHz	

