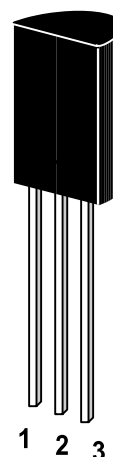


SD13002 / SD13003

NPN Silicon Epitaxial Planar Transistor
for power switching and electron rectifier
applications.

These transistors are subdivided into one group
according to its DC current gain.

On special request, these transistors can be
manufactured in different pin configurations.



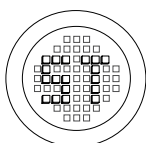
1. Emitter 2. Collector 3. Base

TO-92L Plastic Package
Weight approx. 0.38g

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

	Symbol	Value		Unit
		13002	13003	
Collector Base Voltage	V_{CBO}	600		V
Collector Emitter Voltage	V_{CEO}	400		V
Emitter Base Voltage	V_{EBO}	9		V
Collector Current	I_{C}	1	1.5	A
Power Dissipation	P_{tot}	1.15	1.25	W
Junction Temperature	T_{j}	150		$^{\circ}\text{C}$
Storage Temperature Range	T_{s}	-55~+150		$^{\circ}\text{C}$

G S P FORM A IS AVAILABLE



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РАДИОТЕХ-ТРЕЙД

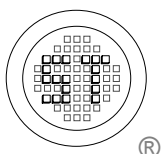
Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

SD13002 / SD13003

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

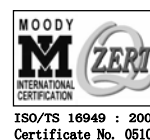
		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=10\text{V}$, $I_C=100\text{mA}$		h_{FE}	10	-	70	
Collector Base Breakdown Voltage at $I_C=1\text{mA}$	13002	$V_{(BR)CBO}$	600	-	-	V
at $I_C=5\text{mA}$	13003					
Collector Emitter Breakdown Voltage at $I_C=5\text{mA}$		$V_{(BR)CEO}$	400	-	-	V
Emitter Base Breakdown Voltage at $I_E=1\text{mA}$		$V_{(BR)EBO}$	9	-	-	V
Collector Cutoff Current at $V_{CB}=600\text{V}$	13002	I_{CBO}	-	-	100	nA
at $V_{CB}=700\text{V}$	13003					
Emitter Cutoff Current at $V_{EB}=9\text{V}$		I_{EBO}	-	-	100	μA
Collector Emitter Saturation Voltage at $I_C=0.1\text{A}$, $I_B=20\text{mA}$	13003	$V_{CE(sat)}$	-	-	0.4	V
at $I_C=0.5\text{A}$, $I_B=100\text{mA}$	13002	$V_{CE(sat)}$	-	-	0.8	V
at $I_C=0.2\text{A}$, $I_B=40\text{mA}$	13003	$V_{CE(sat)}$	-	-	0.8	V
Base-Emitter Saturation Voltage at $I_C=0.1\text{A}$, $I_B=20\text{mA}$	13003	$V_{BE(sat)}$	-	-	0.9	V
at $I_C=0.5\text{A}$, $I_B=100\text{mA}$	13002	$V_{BE(sat)}$	-	-	1.2	V
at $I_C=0.2\text{A}$, $I_B=40\text{mA}$	13003	$V_{BE(sat)}$	-	-	1.1	V

G S P FORM A IS AVAILABLE



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 07/12/2002