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°C)

	Symbol	Value		Linit
		13002	13003	Unit
Collector Base Voltage	V _{CBO}	600		V
Collector Emitter Voltage	V _{CEO}	400		V
Emitter Base Voltage	V_{EBO}	9		٧
Collector Current	Ic	1	1.5	Α
Power Dissipation	P _{tot}	1.15	1.25	W
Junction Temperature	T _j	150		οС
Storage Temperature Range	Ts	-55~+150		°С

G S P FORM A IS AVAILABLE



SEMTECH ELECTRONICS LTD.







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

SD13002 / SD13003

Characteristics at T_{amb}=25 °C

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

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INTERNATIONAL CERTIFICATION ISO/TS 16949: 2002 Certificate No. 05103



