

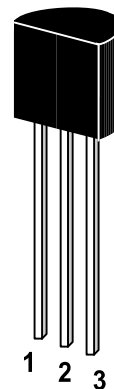
MPSA13 / 14

NPN Silicon Epitaxial Planar Transistors

for general purpose applications, darlington transistor.

The transistor is 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. Base 3. Collector

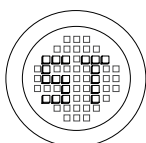
TO-92 Plastic Package

Weight approx. 0.18g

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

	Symbol	Value	Unit
Collector Emitter Voltage	V_{CES}	30	V
Collector Base Voltage	V_{CBO}	30	V
Emitter Base Voltage	V_{EBO}	10	V
Collector Current	I_C	500	mA
Power Dissipation	P_{tot}	625	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$

G S P FORM A IS AVAILABLE



®

РАДИОТЕХ-ТРЕЙД

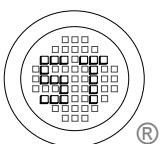
Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

MPSA13 / 14

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

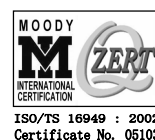
	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at $V_{CE}=5\text{V}$, $I_C=10\text{mA}$	MPSA13	h_{FE}	5000	-	-
	MPSA14	h_{FE}	10000	-	-
at $V_{CE}=5\text{V}$, $I_C=100\text{mA}$	MPSA13	h_{FE}	10000	-	-
	MPSA14	h_{FE}	20000	-	-
Collector Emitter Breakdown Voltage					
at $I_C=100\text{ }\mu\text{A}$	$V_{(BR)CES}$	30	-	-	V
Collector Cutoff Current					
at $V_{CB}=30\text{V}$	I_{CBO}	-	-	100	nA
Emitter Cutoff Current					
at $V_{EB}=10\text{V}$	I_{EBO}	-	-	100	nA
Collector Emitter Saturation Voltage					
at $I_C=100\text{mA}$, $I_B=0.1\text{mA}$	$V_{CE(sat)}$	-	-	1.5	V
Base Emitter On Voltage					
at $I_C=100\text{mA}$, $V_{CE}=5\text{V}$	$V_{BE(on)}$	-	-	2	V
Current Gain Bandwidth Product					
at $V_{CE}=5\text{V}$, $I_C=10\text{mA}$, $f=100\text{MHz}$	f_T	125	-	-	MHz

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