

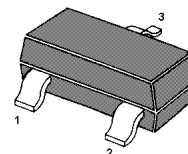
MMBTA14

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. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

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

	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}	200	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{Stg}	-55 to +150	$^{\circ}\text{C}$

MMBTA14

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

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