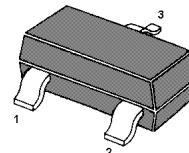


NPN Silicon Epitaxial Planar Transistors

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_s	-55 to +150	$^{\circ}\text{C}$

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

	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE}=5V$, $I_C=10mA$ at $V_{CE}=5V$, $I_C=100mA$	h_{FE} h_{FE}	10000 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