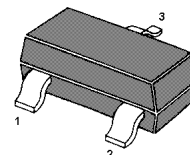


NPN Silicon Epitaxial Planar Transistors

for general purpose applications, darlington transistor.

The transistor is subdivided into one group according to its DC current gain.



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

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

MARKING : K3D

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

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

	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