FAIRCHILD SEMICONDUCTOR®

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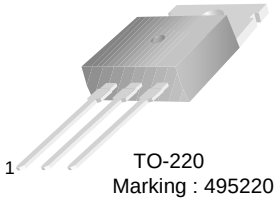
495220
NPN Epitaxial Silicon Darlington Transistor

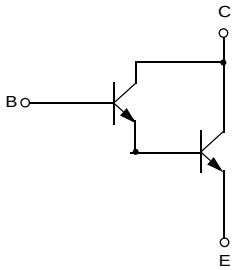
High Voltage & Medium Power Linear Application



TO-220
Marking : 495220

1.Base 2.Collector 3.Emitter

Equivalent Circuit



Absolute Maximum Ratings * T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
BV_{CBO}	Collector-Base Voltage	550	V
BV_{CEO}	Collector-Emitter Voltage	325	V
BV_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current (DC)	4	A
I_{CP}	Collector Current (Pulse)**	6	A
I_B	Base Current (DC)	0.5	A
P_C	Collector Dissipation(T_C=25°C)	40	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Junction Temperature Range	- 55 ~ 150	°C

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.
** Pulse Test : Pulse Width ≤ 5ms, Duty Cycle ≤ 10%

Electrical Characteristics * T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C=1.5A, I_B = 0.05A, L = 25mH	250			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 550V, I_E = 0			5	mA
I_{EBO}	Emitter Cut-off Current	V_{EB}=10V, I_C=0			1	mA
h_{FE}	DC Current Gain	V_{CE}=5V, I_C=0..5A V_{CE}=5V, I_C=3.0A	5000 1000			
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 0.75A, I_B = 0.17A I_C = 2A, I_B = 5mA			1.7 1.5	V V
V_{BE}(sat)	Base-Emitter Saturation Voltage	I_C = 2A, I_B = 5mA			2	V

* Pulse Test : Pulse Width ≤ 5ms, Duty Cycle ≤ 10%

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.
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