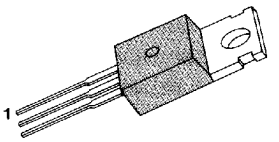
BD242/A/B/C PNP EPITAXIAL SILICON TRANSISTOR

MEDIUM POWER LINEAR AND SWITCHING APPLICATIONS

• Complement to BD241/A/B/C respectively

TO-220



1.Base 2.Collector 3.Emitter

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Emitter Voltage : BD242	V_{CEO}	- 45	V
: BD242A		- 60	V
: BD242B		- 80	V
: BD242C		- 100	V
Collector Emitter Voltage : BD242	V_{CER}	- 55	V
: BD242A		- 70	V
: BD242B		- 90	V
: BD242C		- 115	V
Emitter Base Voltage	V_{EBO}	- 5	V
Collector Current (DC)	I_C	- 3	A
Collector Current (Pulse)	I_C	- 5	A
Base Current	I_B	- 1	A
Collector Dissipation (T_C=25°C)	P_C	40	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-65 ~ 150	°C

ELECTRICAL CHARACTERISTICS (T_C =25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
* Collector Emitter Sustaining Voltage : BD242	V_{CEO}(sus)	I_C = - 30mA, I_B = 0	- 45			V
: BD242A			- 60			V
: BD242B			- 80			V
: BD242C			- 100			V
Collector Cutoff Current : BD242/A	I_{CEO}	V_{CE} = - 30V, I_B = 0			- 0.3	mA
: BD242B/C		V_{CE} = - 60V, I_B = 0			- 0.3	mA
Collector Cutoff Current : BD242	I_{CES}	V_{CE} = - 45V, V_{BE} = 0			- 0.2	mA
: BD242A		V_{CE} = - 60V, V_{BE} = 0			- 0.2	mA
: BD242B		V_{CE} = - 80V, V_{BE} = 0			- 0.2	mA
: BD242C		V_{CE} = - 100V, V_{BE} = 0			- 0.2	mA
Emitter Cutoff Current	I_{EBO}	V_{EB} = - 5V, I_C = 0			- 1	mA
* DC Current Gain	h_{FE}	V_{CE} = - 4V, I_C = - 1A	25			
		V_{CE} = - 4V, I_C = - 3A	10			
* Collector Emitter Saturation Voltage	V_{CE}(sat)	I_C = - 3A, I_B = - 0.6A			- 1.2	V
* Base Emitter On Voltage	V_{BE}(on)	V_{CE} = - 4V, I_C = - 3A			- 1.8	V

* Pulse Test: PW=300μs, duty Cycle≤2% Pulsed

Rev. B

FAIRCHILD SEMICONDUCTOR™