



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

LB120A

TECHNICAL SPECIFICATIONS OF NPN TRIPLE DIFFUSED PLANAR TRANSISTOR

Description

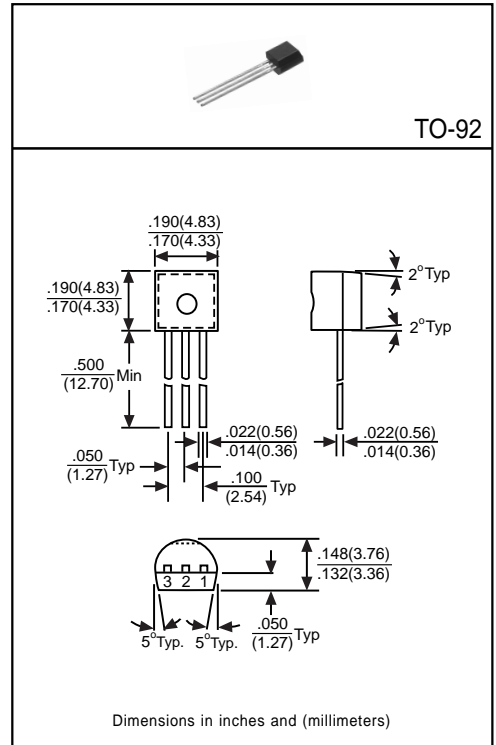
Designed for use in high-voltage switching applications.

Pinning

- 1 = Emitter
- 2 = Collector
- 3 = Base

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	600	V
Collector-Emitter Voltage	V _{CEO}	400	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current (DC)	I _C	100	mA
Collector Current (pulse)	I _C	200	mA
Base Current (DC)	I _B	20	mA
Base Current (pulse)	I _B	40	mA
Total Power Dissipation	P _D	0.8	W
Total Power Dissipation(T _C =25°C)	P _D	7	W
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-55 to +150	°C



Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV _{CB0}	600	-	-	V	I _C =100μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	400	-	-	V	I _C =10mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	5	-	-	V	I _E =10μA, I _C =0
Collector Cutoff Current	I _{CBO}	-	-	10	μA	V _{CB} =550V, I _E =0
	I _{CEO}	-	-	10	μA	V _{CE} =400V, I _B =0
Emitter Cutoff Current	I _{EBO}	-	-	10	μA	V _{EB} =6V, I _C =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)1}	-	-	0.4	V	I _C =50mA, I _B =10mA
	V _{CE(sat)2}	-	-	0.75	V	I _C =100mA, I _B =20mA
Base-Emitter Saturation Voltage ⁽¹⁾	V _{BE(sat)}	-	-	1	V	I _C =50mA, I _B =10mA
DC Current Gain ⁽¹⁾	h _{FE1}	8	-	-	-	I _C =10mA, V _{CE} =10V
	h _{FE2}	10	-	36	-	I _C =50mA, V _{CE} =10V

(1)Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%