DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

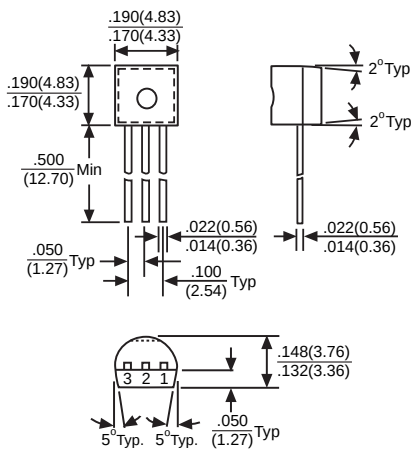
BC635

TECHNICAL SPECIFICATIONS OF NPN EPITAXIAL PLANAR TRANSISTOR

Description

Designed for general purpose switching and amplifier applications.

TO-92



Dimensions in inches and (millimeters)

Pinning

1 = Emitter
2 = Collector
3 = Base

Absolute Maximum Ratings (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CES}	45	V
	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Total Power Dissipation	P_D	1	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-Emitter Breakdown Voltage	BV_{CEO}	45	-	-	V	I_C=10mA, I_B=0
Emitter-Base Breakdown Volatge	BV_{EBO}	5	-	-	V	I_E=100μA, I_C=0
Collector Cutoff Current	I_{CBO}	-	-	0.1	μA	V_{CB}=30V, I_E=0
Emitter Cutoff Current	I_{EBO}	-	-	0.1	μA	V_{EB}=5V, I_C=0
Collector-Emitter Saturation Voltage(1)	$V_{CE(sat)}$	-	-	0.5	V	I_C=500mA, I_B=50mA
Base-Emitter On Voltage(1)	$V_{BE(on)}$	-	-	1	V	I_C=500mA, V_{CE}=2V
DC Current Gain(1)	h_{FE1}	25	-	-	-	I_C=5mA, V_{CE}=2V
	h_{FE2}	40	-	250	-	I_C=150mA, V_{CE}=2V
	h_{FE3}	25	-	-	-	I_C=500mA, V_{CE}=2V
Transition Frequency	f_T	-	100	-	MHz	I_C=10mA, V_{CE}=5V, f=50MHz

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