DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

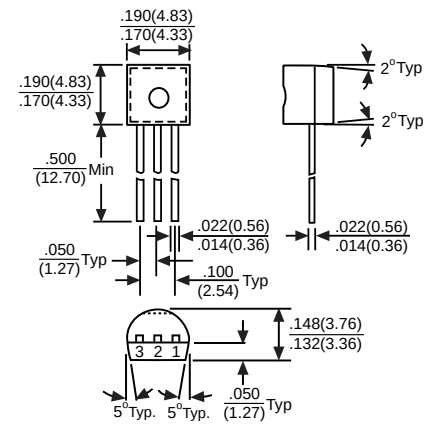
BC327

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

Designed for driver and output stage of audio amplifiers.

TO-92



Dimensions in inches and (millimeters)

Pinning

1 = Collector
2 = Base
3 = Emitter

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-500	mA
Total Power Dissipation	P_D	625	mW
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 Volatge	BV_{CBO}	-50	-	-	V	I_C=-100μA, I_E=0
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)	$V_{CE(sat)}$	-	-	-0.7	V	I_C=-500mA, I_B=-50mA
Base-Emitter On Voltage(1)	$V_{BE(on)}$	-	-	-1.2	V	V_{CE}=-1V, I_C=-300mA
DC Current Gain(1)	h_{FE1}	100	-	630	-	I_C=-100mA, V_{CE}=-1V
	h_{FE2}	40	-	-	-	I_C=-300mA, V_{CE}=-1V
Transition Frequency	f_T	-	100	-	MHz	I_C=-10mA, V_{CE}=-5V, f=100MHz
Output Capacitance	C_{ob}	-	4	-	pF	V_{CB}=-10V, f=1MHz, I_C=0

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

Classification of h_{FE1}

Rank	16	25	40
Range	100~250	160~400	250~630

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