DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

DC8550

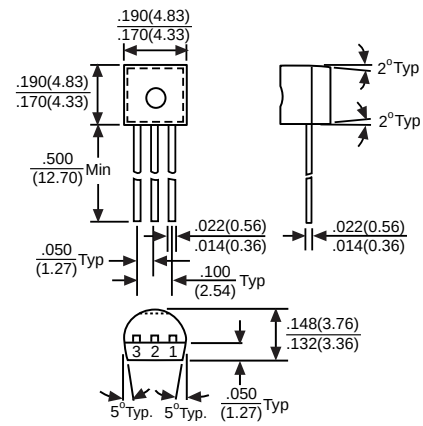
TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

Designed for use in 2W output amplifier of portable radios in class B push-pull operation.



TO-92



Dimensions in inches and (millimeters)

Pinning

1 = Emitter
2 = Base
3 = Collector

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-1.5	A
Base Current	I_B	-500	mA
Total Power Dissipation	P_D	1	W
Total Power Dissipation(T_C=25°C)	P_D	2	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 Volatge	BV_{CBO}	-40	-	-	V	I_C=-100μA
Collector-Emitter Breakdown Voltage	BV_{CEO}	-25	-	-	V	I_C=-2mA
Emitter-Base Breakdown Volatge	BV_{EBO}	-6	-	-	V	I_E=-100μA
Collector Cutoff Current	I_{CBO}	-	-	-0.1	μA	V_{CB}=-35V
Emitter Cutoff Current	I_{EBO}	-	-	-0.1	μA	V_{EB}=-6V
Collector-Emitter Saturation Voltage(1)	$V_{CE(sat)}$	-	-	-0.5	V	I_C=-0.8A, I_B=-80mA
Base-Emitter Saturation Voltage(1)	$V_{BE(sat)}$	-	-	-1.2	V	I_C=-0.8A, I_B=-80mA
Base-Emitter On Voltage(1)	$V_{BE(on)}$	-	-	-1	V	I_C=-10mA, V_{CE}=-1V
DC Current Gain(1)	h_{FE1}	45	-	-	-	I_C=-5mA, V_{CE}=-1V
	h_{FE2}	85	-	500	-	I_C=-100mA, V_{CE}=-1V
	h_{FE3}	40	-	-	-	I_C=-800mA, V_{CE}=-1V
Transition Frequency	f_T	100	-	-	MHz	I_C=-50mA, V_{CE}=-10V, f=100MHz

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

Classification of h_{FE2}

Rank	B	C	D	E
Range	85~160	120~200	160~300	250~500

Diode, Bridge Rectifiers INDEX① Diode, Bridge Rectifiers INDEX② Transistors, SCR, IC INDEX① Transistors, SCR, IC INDEX② EXIT