



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

DC8550

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

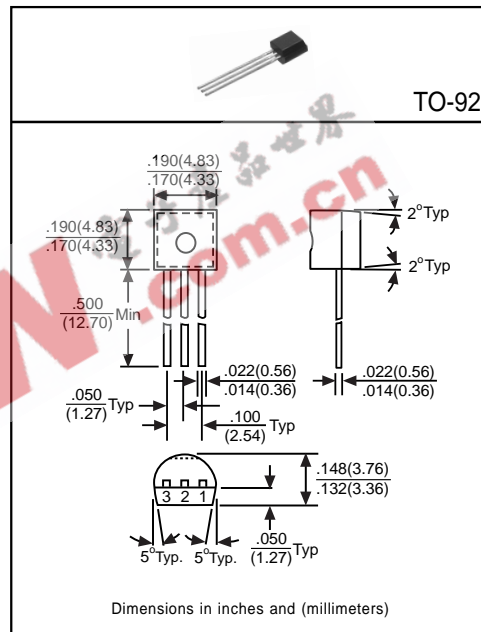
Designed for use in 2W output amplifier of portable radios in class B push-pull operation.

Pinning

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

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CEO}	-25	V
Emitter-Base Voltage	V _{EB0}	-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 Voltage	BV _{CB0}	-40	-	-	V	I _C =-100μA
Collector-Emitter Breakdown Voltage	BV _{CEO}	-25	-	-	V	I _C =-2mA
Emitter-Base Breakdown Voltage	BV _{EB0}	-6	-	-	V	I _E =-100μA
Collector Cutoff Current	I _{CB0}	-	-	-0.1	μA	V _{CB} =-35V
Emitter Cutoff Current	I _{EB0}	-	-	-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