



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

2SD880

TECHNICAL SPECIFICATIONS OF NPN EPITAXIAL PLANAR TRANSISTOR

Description

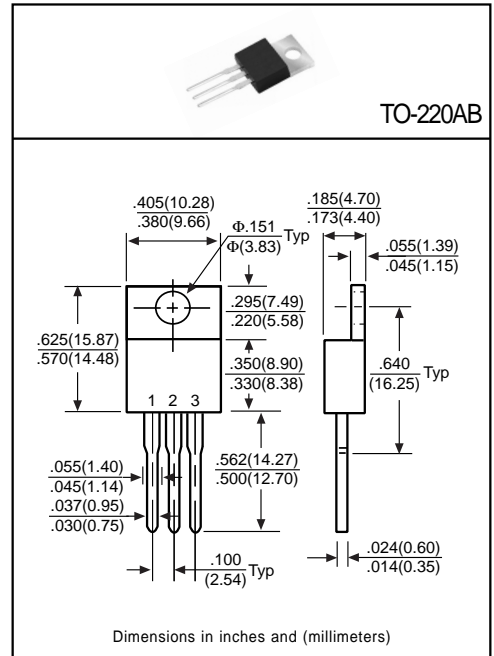
Designed for low frequency power amplifier applications.

Pinning

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

Absolute Maximum Ratings(T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	60	V
Collector-Emitter Voltage	V _{CEO}	60	V
Emitter-Base Voltage	V _{EBO}	7	V
Collector Current	I _C	3	A
Base Current	I _B	0.5	A
Total Power Dissipation	P _D	1.5	W
Total Power Dissipation(T _C =25°C)	P _D	30	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 _{CBO}	60	-	-	V	I _C =1mA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	60	-	-	V	I _C =50mA, I _B =0
Collector Cutoff Current	I _{CBO}	-	-	0.1	mA	V _{CB} =60V, I _E =0
Emitter Cutoff Current	I _{EBO}	-	-	0.1	mA	V _{EB} =7V, I _C =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)}	-	-	1	V	I _C =3A, I _B =0.3A
Base-Emitter On Voltage ⁽¹⁾	V _{BE(on)}	-	-	1	V	I _C =0.5A, V _{CE} =5V
DC Current Gain ⁽¹⁾	h _{FE}	60	-	300	-	I _C =0.5A, V _{CE} =5V
Transition Frequency	f _T	-	3	-	MHz	I _C =0.5A, V _{CE} =5V

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

Classification of h_{FE}

Rank	O	Y	GR
Range	60~120	100~200	150~300