



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

BU406

TECHNICAL SPECIFICATIONS OF NPN EPITAXIAL PLANAR TRANSISTOR

Description

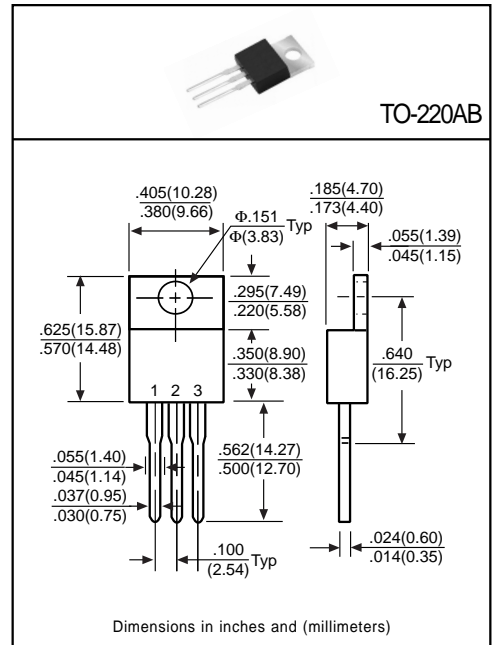
Designed for use in TV horizontal output and switching applications.

Pinning

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

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V _{CEO}	200	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current	I _C	7	A
Base Current	I _B	4	A
Total Power Dissipation (T _C =25°C)	P _D	60	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}	200	-	-	V	I _C =100mA, I _B =0
Collector Cutoff Current	I _{CES}	-	-	5	mA	V _{CE} =400V
Emitter Cutoff Current	I _{EBO}	-	-	1	mA	V _{EB} =6V, I _C =0
Collector-Emitter Saturation Voltage ⁽¹⁾	V _{CE(sat)}	-	-	1	V	I _C =5A, I _B =0.5A
Base-Emitter Saturation Voltage ⁽¹⁾	V _{BE(sat)}	-	-	1.2	V	I _C =5A, I _B =0.5A
DC Current Gain ⁽¹⁾	h _{FE1}	25	-	-	-	I _C =0.5A, V _{CE} =5V
	h _{FE2}	30	-	125	-	I _C =2A, V _{CE} =5V
	h _{FE3}	10	-	-	-	I _C =2A, V _{CE} =5V

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

Classification of h_{FE2}

Rank	A	B	C
Range	30-45	35-85	75-125