

TRIPLE DIFFUSED PLANER TYPE
ULTRA HIGH β TRANSISTOR
INDUSTRIAL USE POWER SUPPLY

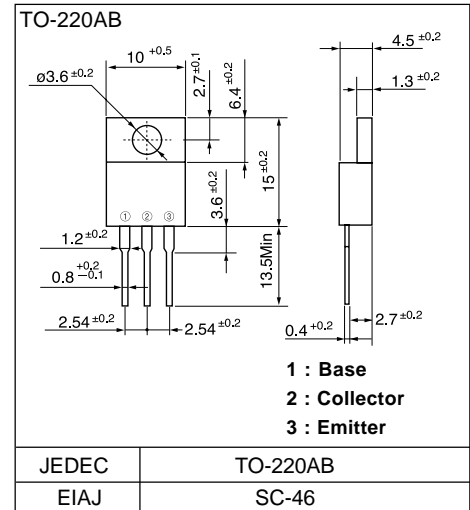
Features

- Ultra high β
- Excellent linearity in hFE
- Excellent safe operating area
- High reliability

Applications

- Color & B/W TV power supply
- Active power filter
- Industrial use power supply (Series regulator)
- General purpose power amplifiers

Outline Drawings



Maximum ratings and characteristics

- Absolute maximum ratings ($T_c = 25^\circ\text{C}$ unless otherwise specified)

Item	Symbol	Ratings	Unit
Collector-Base voltage	V_{CB0}	200	V
Collector-Emitter voltage	V_{CE0}	180	V
Emitter-Base voltage	V_{EB0}	6	V
Collector current	I_C	5	A
Base current	I_B	0.5	A
Collector power dissipation	P_C	40	W
Operating junction temperature	T_j	+150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

- Electrical characteristics ($T_c = 25^\circ\text{C}$ unless otherwise specified)

Item	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Collector-Base voltage	V_{CB0}	$I_{CBO} = 1\text{mA}$	200			V
Collector-Emitter voltage	V_{CE0}	$I_{CEO} = 10\text{mA}$	180			V
Emitter-Base voltage	V_{EB0}	$I_{EBO} = 1\text{mA}$	6			V
Collector-Base leakage current	I_{CBO}	$V_{CB0} = 200\text{V}$			1.0	mA
Emitter-Base leakage current	I_{EBO}	$V_{EB0} = 6\text{V}$			1.0	mA
D.C. current gain	hFE	$I_C = 1\text{A}$, $V_{CE} = 4\text{V}$	700			
Collector-Emitter saturation voltage	$V_{CE(Sat)}$	$I_C = 1.5\text{A}$, $I_B = 50\text{mA}$			1.5	V
Base-Emitter saturation voltage	$V_{BE(Sat)}$				2.0	V

- Thermal characteristics

Item	Symbol	Test Conditions	Min.	Typ.	Max.	Units
Thermal resistance	$R_{th(j-c)}$	Junction to case			3.1	$^\circ\text{C/W}$

Characteristics

