

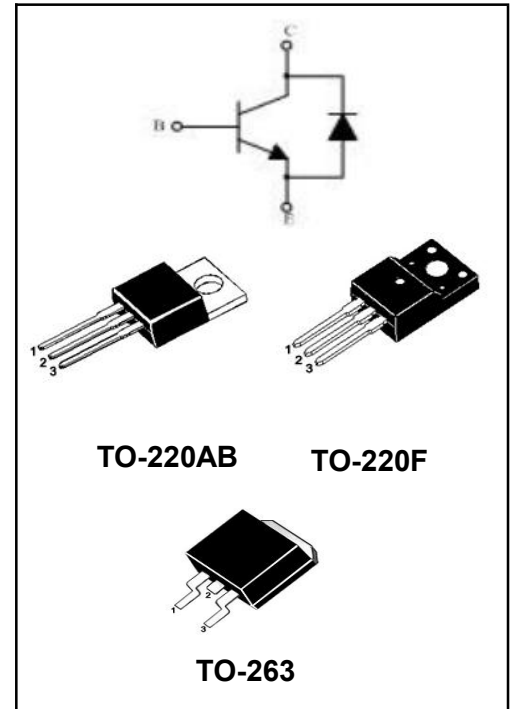
NPN Silicon Epitaxial Planar Transistor

Features

- ◆ High voltage
- ◆ High speed switching

APPLICATIONS

- ◆ High Speed Switching
- ◆ Suitable for Switching Regulator and Motor Control



Mechanical Data

- ◆ Case: Molded plastic
- ◆ Polarity: As marked
- ◆ Mounting Position: Any
- ◆ Molded Plastic: UL Flammability Classification Rating 94V-0
- ◆ Lead free in compliance with EU RoHS 2011/65/EU directive
- ◆ Solder bath temperature 275°C maximum, 10s per JESD 22- B106

Product Specification Classification

Part Number	Package	Marking	Pack
YFW13007AT	TO-220AB	YFW 13007AT XXXXX	1000PCS/box
YFW13007AF	TO-220F	YFW 13007AF XXXXX	1000PCS/box
YFW13007AS	TO-263	YFW 13007AS XXXXX	800PCS/Reel

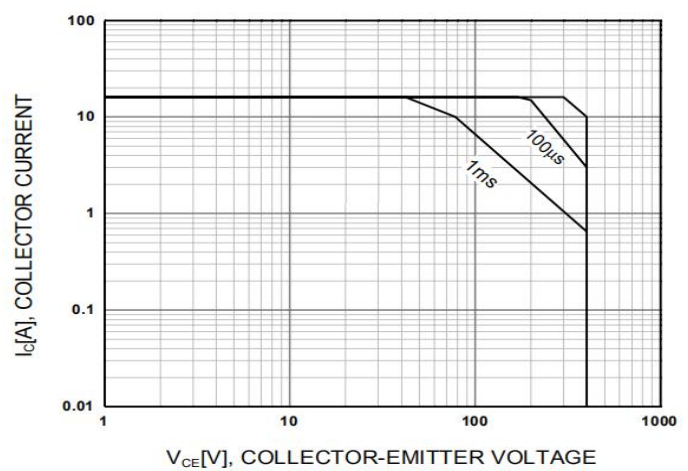
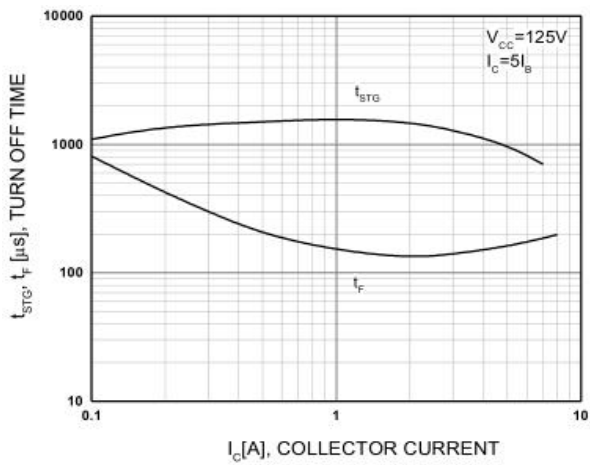
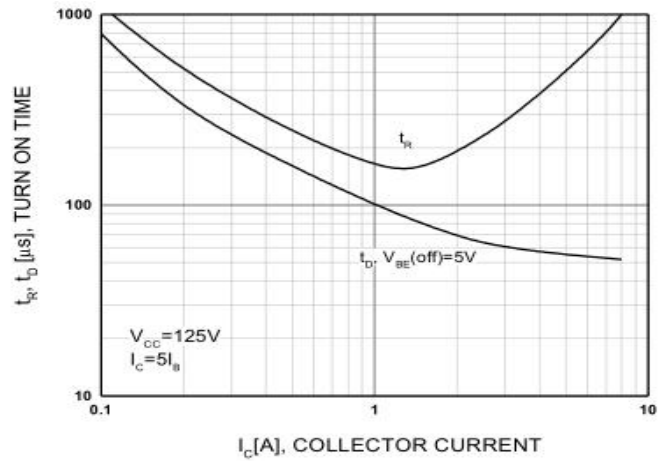
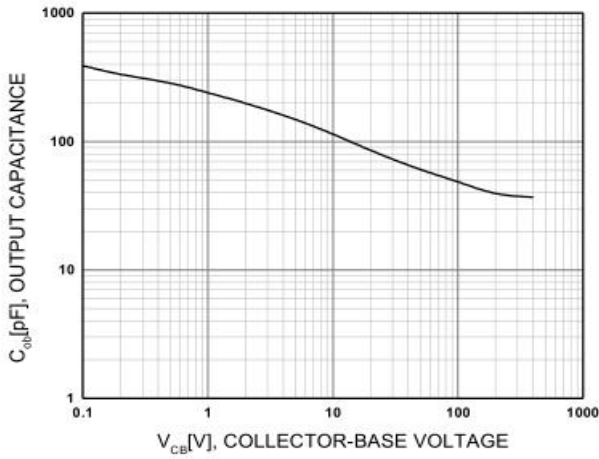
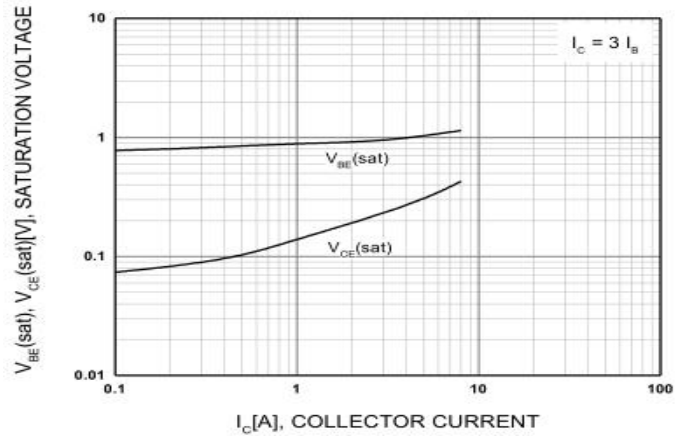
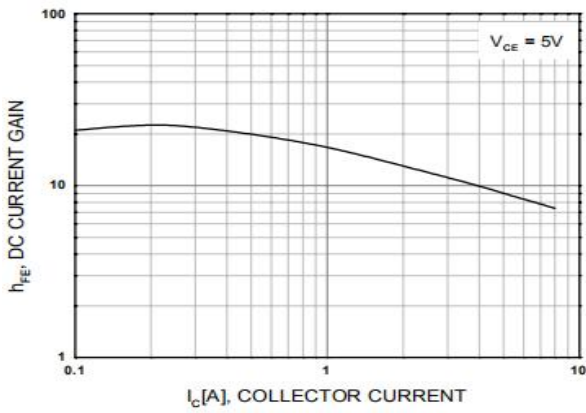
Maximum Ratings at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	700	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	9	V
Collector Current	I_C	8	A
Power Dissipation (Tc = 25 °C) Superimposed on Rated Load (JEDEC method)	P_{tot}	2	W
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 5\text{ V}$, $I_C = 2\text{ A}$	h_{FE}	8	-	40	-
Collector Base Cutoff Current at $V_{CB} = 700\text{ V}$	I_{CBO}	-	-	10	μA
Collector Emitter Cutoff Current at $V_{CE} = 400\text{ V}$	I_{CEO}	-	-	10	μA
Emitter Base Cutoff Current at $V_{EB} = 9\text{ V}$	I_{EBO}	-	-	10	μA
Collector Emitter Saturation Voltage at $I_C = 2\text{ A}$, $I_B = 400\text{mA}$	$V_{CE(sat)}$	-	-	1	V
Base Emitter Saturation Voltage at $I_C = 2\text{ A}$, $I_B = 400\text{mA}$	$V_{BE(sat)}$	-	-	1.2	V
Transition Frequency at $V_{CE}=10\text{V}$, $I_C=500\text{mA}$, $f=1\text{MHZ}$	f_T	4	-	-	MHZ

Ratings And Characteristic Curves

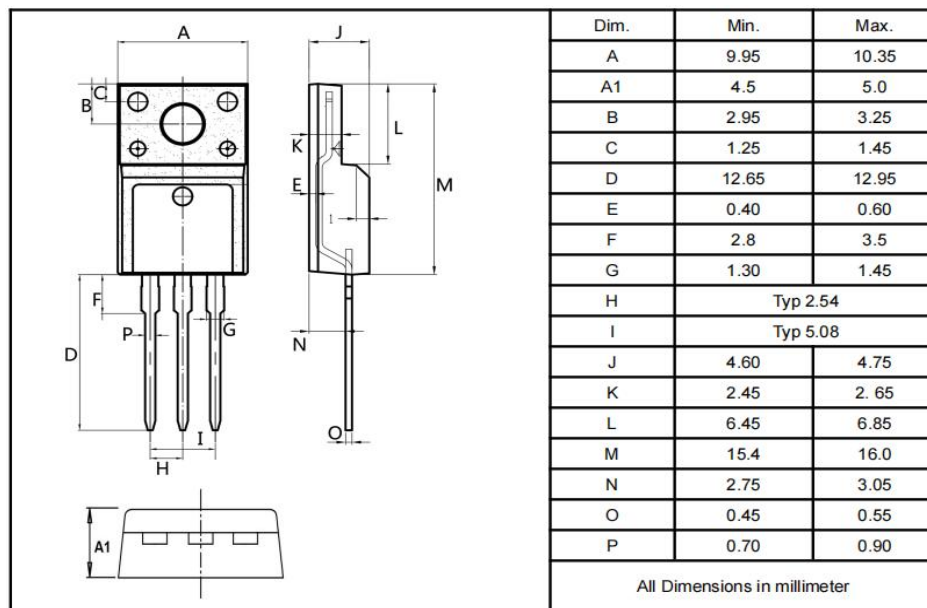


Package Outline Dimensions millimeters

TO-220AB



TO-220F



TO-263

