

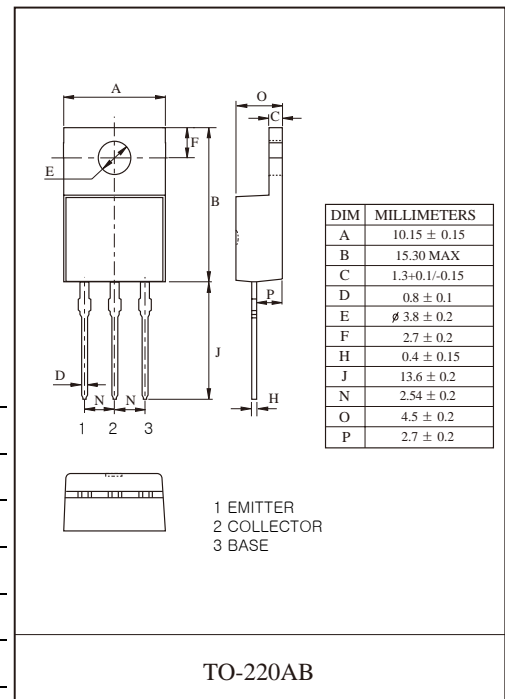
FTB834 TRANSISTOR (PNP)

FEATURES

- Low Collector -Emitter Saturation Voltage
 $V_{CE(sat)}=1.0v(\text{Max}) @ I_C=-3A, I_B=-0.3A$
- DC current Gain
 $h_{FE} =60-200 @ I_C=0.5A$
- Complementary to NPN FTD880

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector- Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current -Continuous	-3	A
P_C	Collector Power Dissipation	1.5	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55-150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-1mA, I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-50mA, I_B=0$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-1mA, I_C=0$	-7			V
Collector cut-off current	I_{CBO}	$V_{CB}=-60V, I_E=0$			-100	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-7V, I_C=0$			-100	μA
DC current gain	$h_{FE(1)^*}$	$V_{CE}=-5V, I_C=-500mA$	60		200	
	$h_{FE(2)^*}$	$V_{CE}=-5V, I_C=-3A$	20			
Collector-emitter saturation voltage	$V_{CE(sat)^*}$	$I_C=-3A, I_B=-0.3A$			-1	V
Base-emitter voltage	V_{BE}^*	$V_{CE}=-5V, I_C=-500mA$			-1	V
Transition frequency	f_T	$V_{CE}=-5V, I_C=-500mA, f=1MHz$		9		MHz
Turn-on Time	t_{on}	$V_{CC}=-30V, I_C=-2A, I_{B1}=I_{B2}=-0.2A$		0.4		μs
Storage Time	t_{stg}			1.7		μs
Turn-off Time	t_{off}			0.5		μs

*Pulse test.

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	60-120	100-200

Typical Characteristics

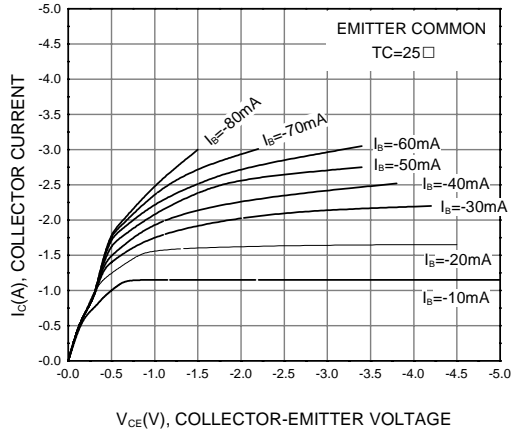


Figure 1. Static Characteristic

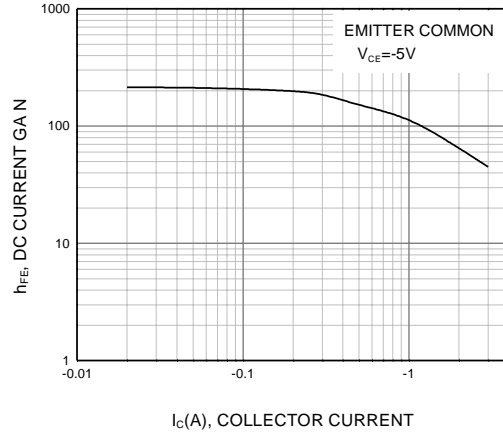


Figure 2. DC current Gain

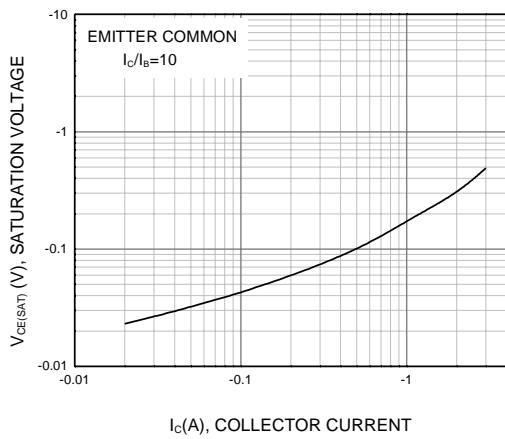


Figure 3. Collector-Emitter Saturation Voltage

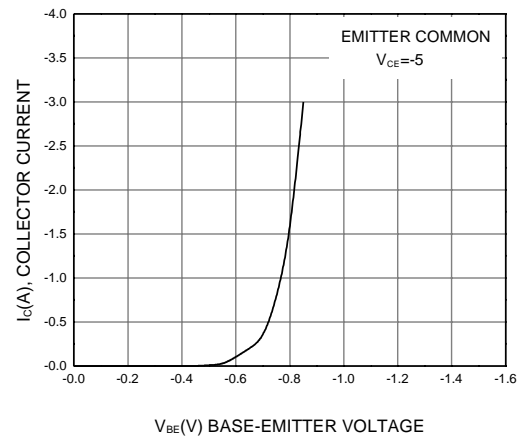


Figure 4. Base-Emitter On Voltage

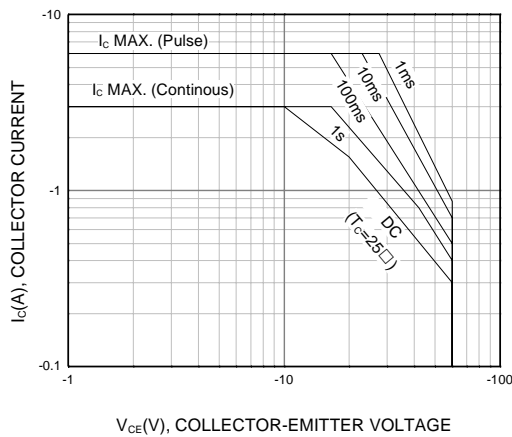


Figure 5. Safe Operating Area

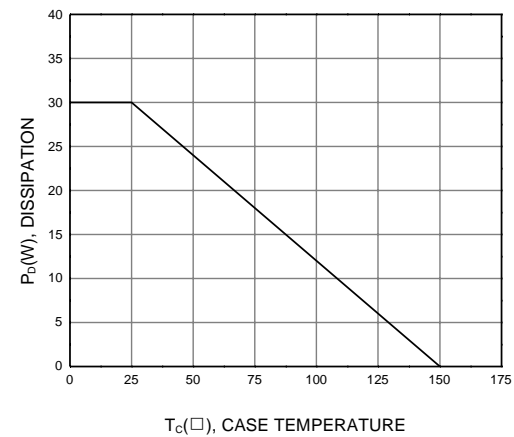


Figure 6. Power Derating