

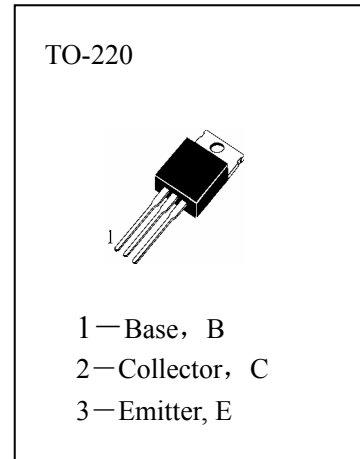
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APPLICATIONS

Power Linear And Switching Application.

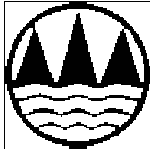
ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

- T_{stg}—Storage Temperature..... -65~150°C
- T_j—Junction Temperature..... 150°C
- P_C—Collector Dissipation (T_c=25°C) 80W
- V_{CBO}—Collector-Base Voltage.....-100V
- V_{CEO}—Collector-Emitter Voltage..... -100V
- I_C—Collector Current (DC) -12A
- I_C—Collector Current (Pulse).....-15A
- I_B—Base Current.....-0.2A



ELECTRICAL CHARACTERISTICS (T_a=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	-100			V	I _C =-100mA, I _B =0
I _{CEO}	Collector Cut-off Current			-1	mA	V _{CE} =-100V, I _B =0
I _{EBO}	Emitter-Base Cutoff Current			-2	mA	V _{EB} =-5V, I _C =0
I _{CBO}	Collector Cut-off Current			-100	μ A	V _{CB} =-100V, I _E =0
H _{FE} (1)	DC Current Gain	1000				V _{CE} =-3V, I _C =-3A
H _{FE} (2)		750	20000			V _{CE} =-3V, I _C =-5A
H _{FE} (3)		100				V _{CE} =-3V, I _C =-10A
V _{CE(sat1)}	Collector- Emitter Saturation Voltage			-2	V	I _C =-5A, I _B =-20mA
V _{CE(sat2)}	Collector- Emitter Saturation Voltage			-3	V	I _C =-10A, I _B =-100mA
V _{BE(sat1)}	Base-Emitter Saturation Voltage			-2.5	V	I _C =-5A, I _B =-20mA
V _{BE(sat2)}	Base-Emitter Saturation Voltage			-4	V	I _C =-10A, I _B =-100mA



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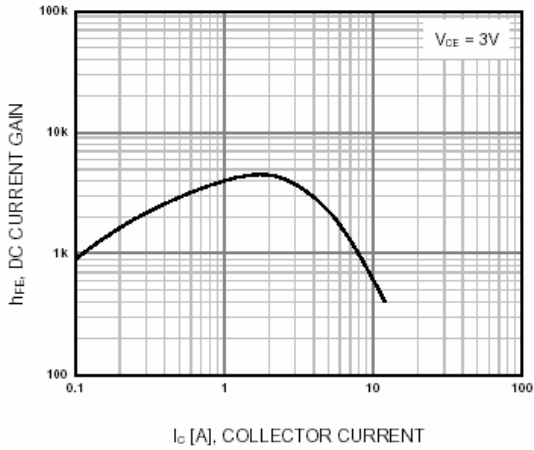


Figure 1. DC Current Gain

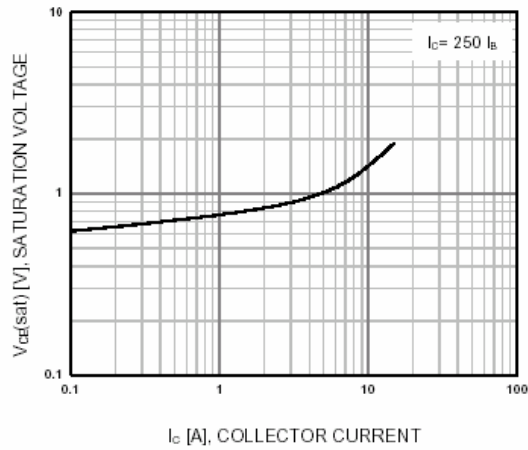


Figure 2. Collector-Emitter Saturation Voltage

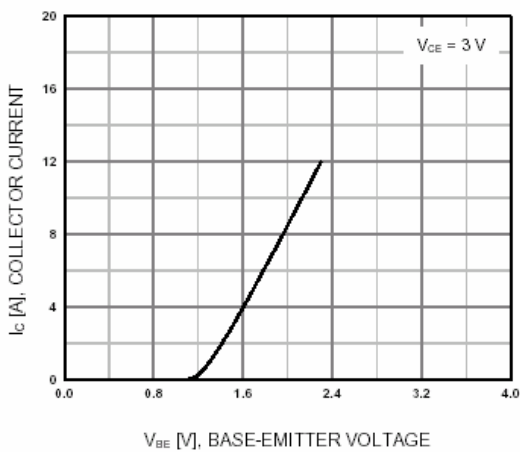


Figure 3. Base-Emitter On Voltage

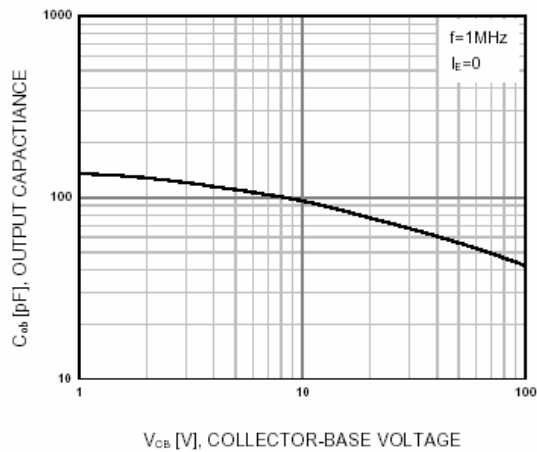


Figure 4. Collector Output Capacitance

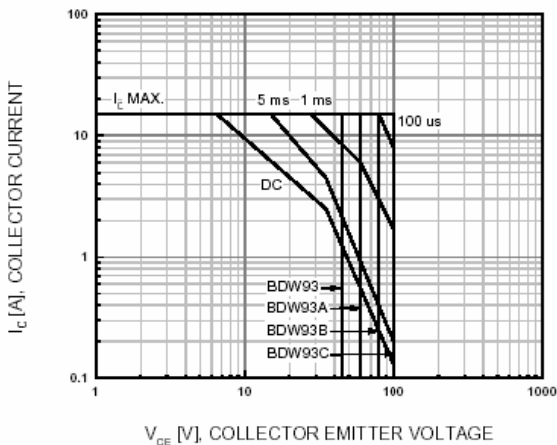


Figure 5. Safe Operating Area

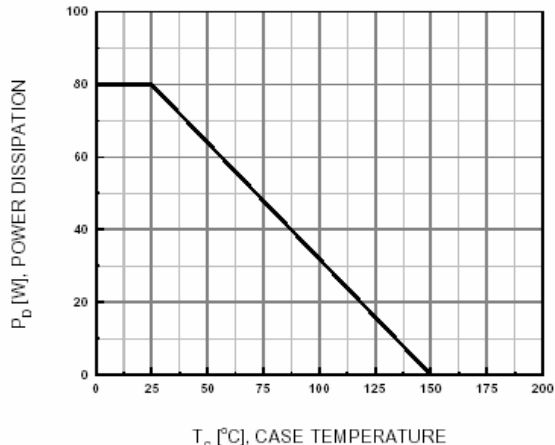


Figure 6. Power Derating