



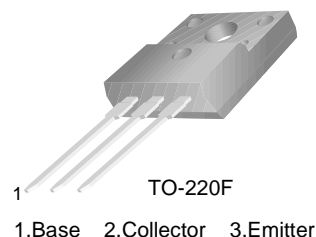
**THE DATASHEET OF
FJPF9020TU**



FJPF9020

Monolithic Construction With Built In Base-Emitter Shunt Resistors

- High Collector-Base Breakdown Voltage : $BV_{CBO} = -550V$
- High DC Current Gain : $h_{FE} = 550$ @ $V_{CE} = -4V, I_C = -1A$ (Typ.)
- Industrial Use

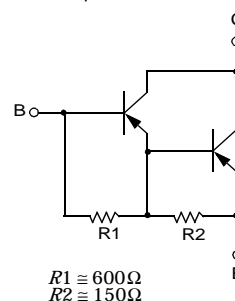


PNP Epitaxial Darlington Transistor

Absolute Maximum Ratings $T_C=25^\circ C$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	- 550	V
V_{CEO}	Collector-Emitter Voltage	- 550	V
V_{EBO}	Emitter-Base Voltage	- 6	V
I_C	Collector Current (DC)	- 2	A
I_{CP}	Collector Current (Pulse)	- 4	A
P_C	Collector Dissipation ($T_C=25^\circ C$)	15	W
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ C$

Equivalent Circuit



Electrical Characteristics $T_C=25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = -100\mu A, I_E = 0$	- 550			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = -500\mu A, I_B = 0$	- 550			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -200mA, I_C = 0$	-6			V
I_{CBO}	Collector Cut-off Current	$V_{CE} = -550V, I_E = 0$			-100	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = -6V, I_C = 0$		-10	-20	mA
h_{FE}	DC Current Gain	$V_{CE} = -4V, I_C = -1A$	400	550	700	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1A, I_B = -20mA$		-1.0	- 1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1A, I_B = -20mA$		-1.5	- 2.0	V

Typical Characteristics

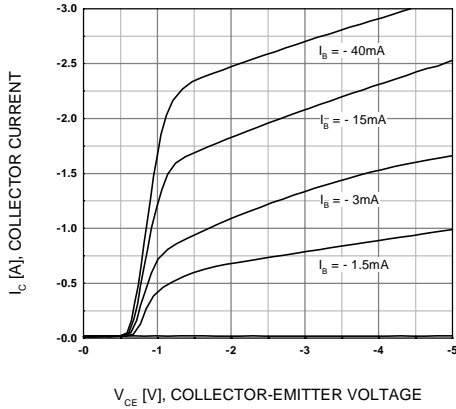


Figure 1. Static Characteristic

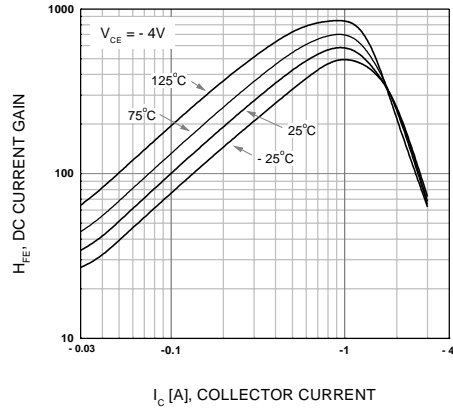


Figure 2. DC current Gain

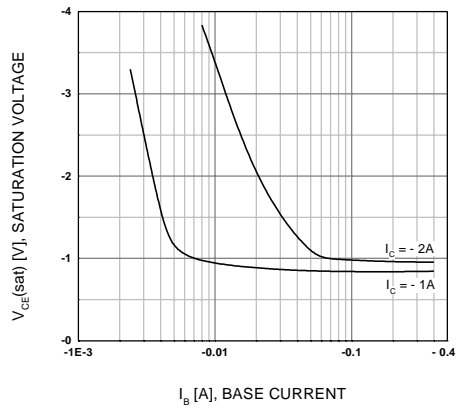


Figure 3. $V_{CE(sat)}$ vs. I_b Characteristics

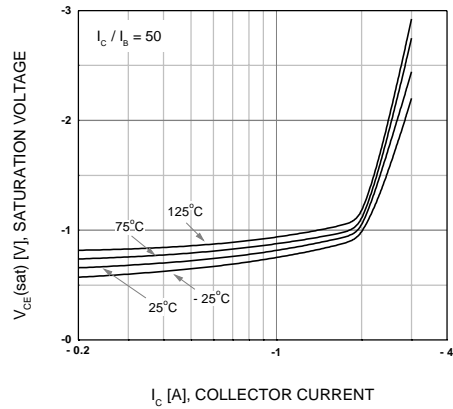


Figure 4. Collector-Emitter Saturation Voltage

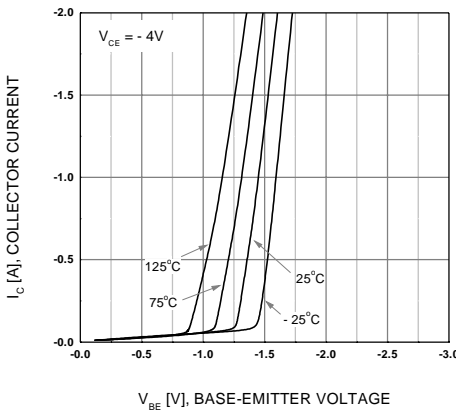


Figure 5. Base-Emitter On Voltage

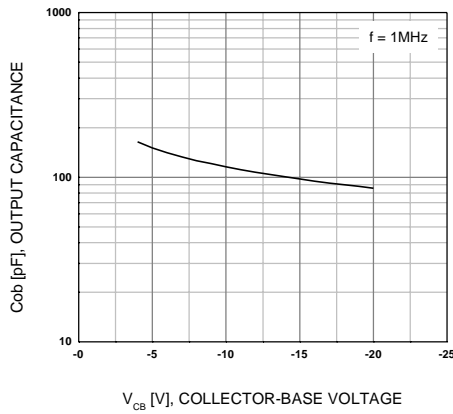


Figure 6. Output Capacitance

Typical Characteristics (Continued)

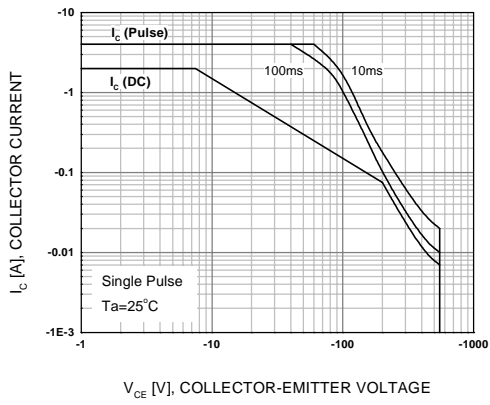


Figure 7. Forward Bias Safe Operating Area

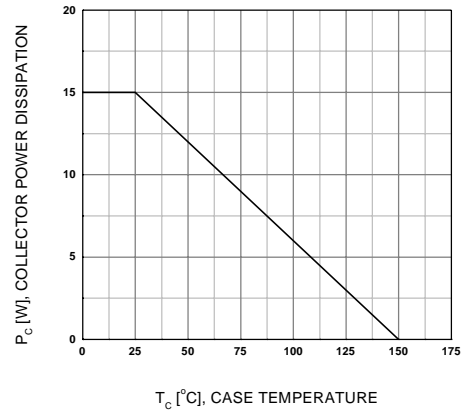


Figure 8. Power Derating

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