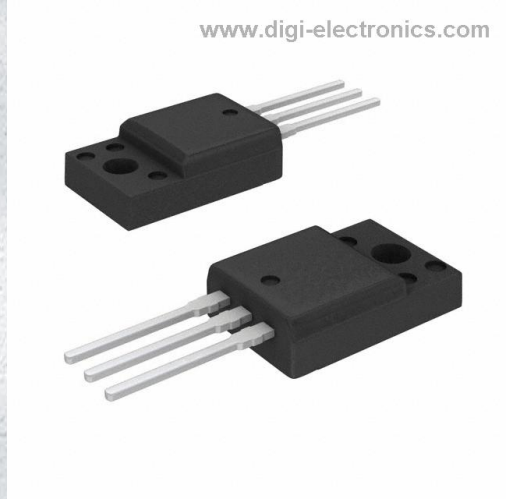
FJPF9020TU Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	FJPF9020TU-DG
Manufacturer	onsemi
Manufacturer Product Number	FJPF9020TU
Description	TRANS PNP DARL 550V 2A TO220F-3
Detailed Description	Bipolar (BJT) Transistor PNP - Darlington 550 V 2 A 15 W Through Hole TO-220F-3

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
FJPF9020TU	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
PNP - Darlington	2 A
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
550 V	1.5V @ 20mA, 1A
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
100µA (ICBO)	400 @ 1A, 4V
Power - Max:	Frequency - Transition:
15 W	-
Operating Temperature:	Mounting Type:
150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-220-3 Full Pack	TO-220F-3
Base Product Number:	
FJPF90	

Environmental & Export classification

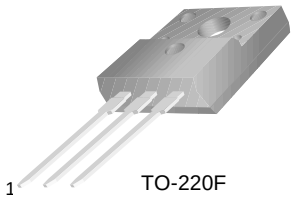
Moisture Sensitivity Level (MSL):	REACH Status:
1 (Unlimited)	REACH Unaffected
ECCN:	HTSUS:
EAR99	8541.29.0095

FAIRCHILD
SEMICONDUCTOR®

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



TO-220F

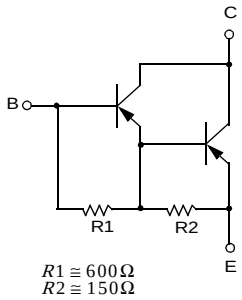
1.Base 2.Collector 3.Emitter

PNP Epitaxial Darlington Transistor

Absolute Maximum Ratings T_C=25°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°C)	15	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

Equivalent Circuit



$R1 \cong 600\Omega$
$R2 \cong 150\Omega$

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = - 100uA, I_E = 0	- 550			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = - 500uA, 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

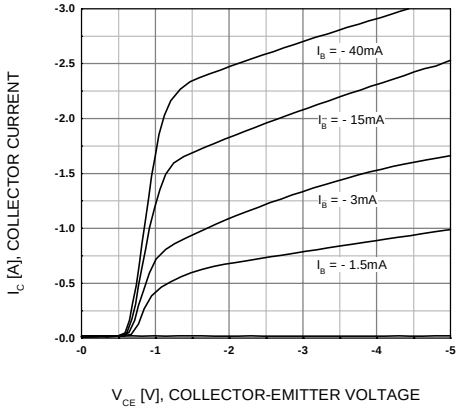


Figure 1. Static Characterstic

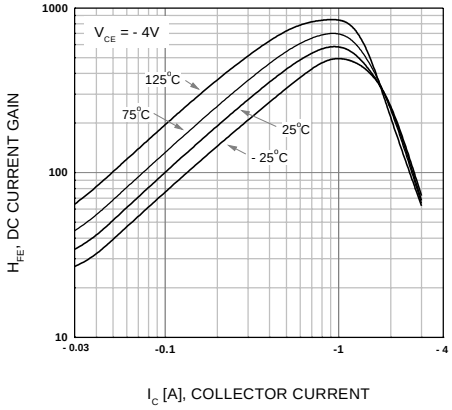


Figure 2. DC current Gain

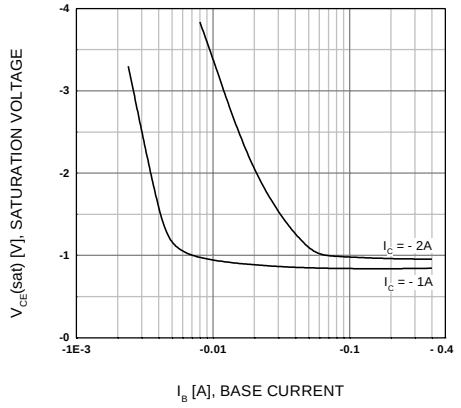


Figure 3. V_{CE}(sat) vs. I_B Characteristics

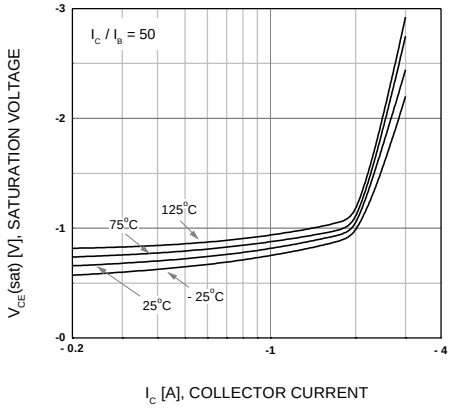


Figure 4. Collector-Emitter Saturation Voltage

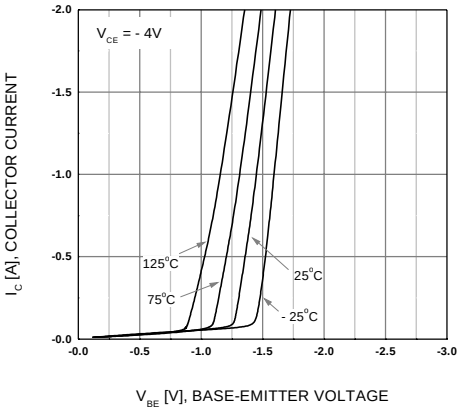


Figure 5. Base-Emitter On Voltage

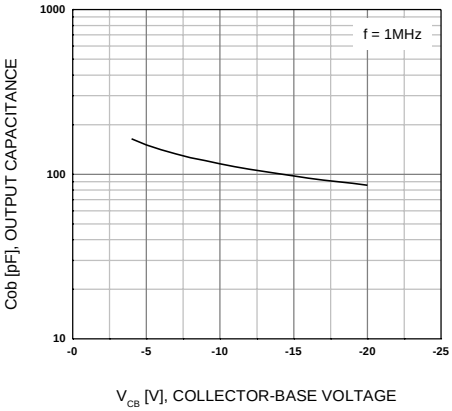


Figure 6. Output Capacitance

Typical Characteristics (Continued)

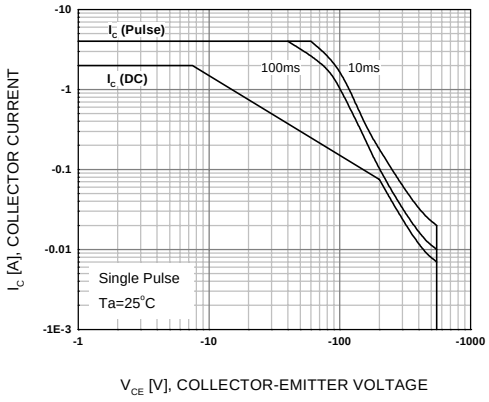


Figure 7. Forward Bias Safe Operating Area

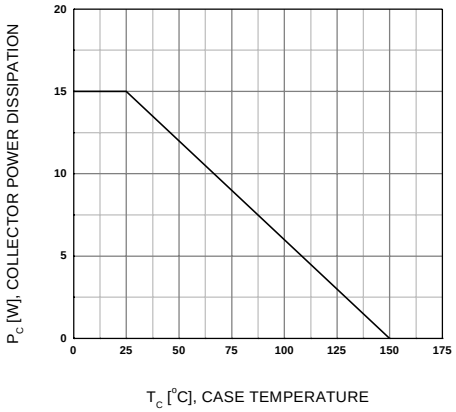
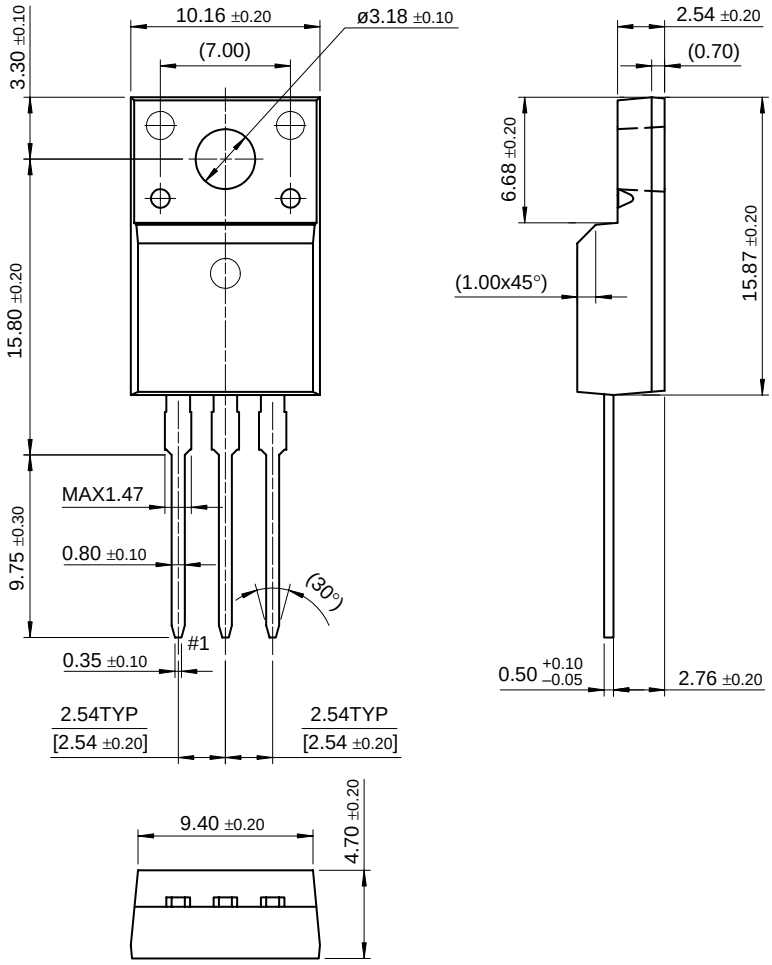


Figure 8. Power Derating

Package Demensions

TO-220F



Dimensions in Millimeters

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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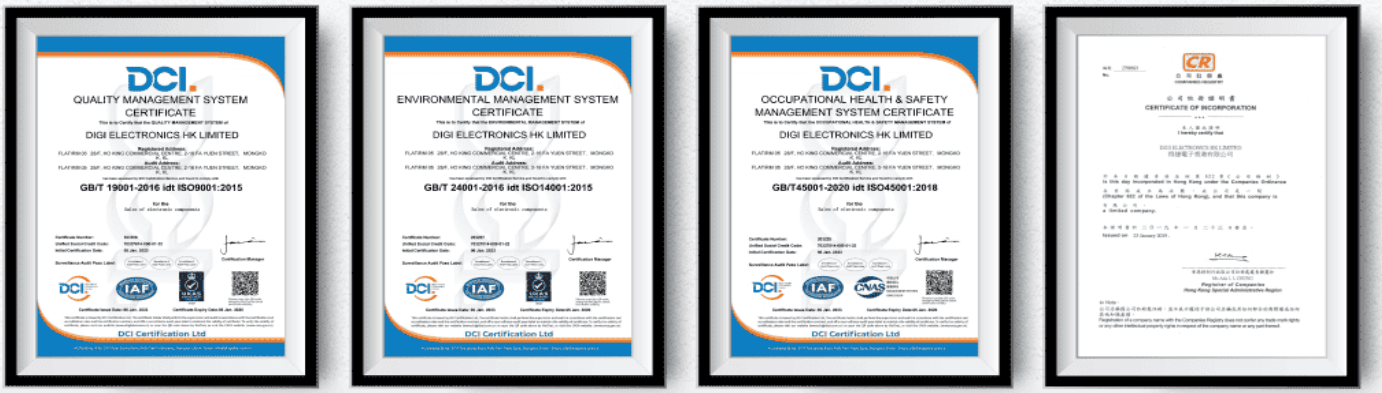

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