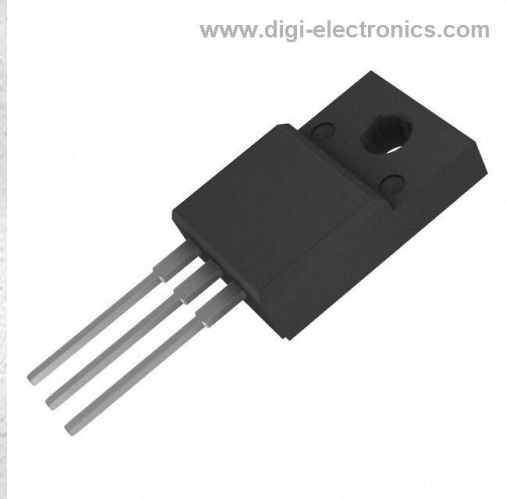
FJAF6916TU Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	FJAF6916TU-DG
Manufacturer	onsemi
Manufacturer Product Number	FJAF6916TU
Description	TRANS NPN 800V 16A TO3PF
Detailed Description	Bipolar (BJT) Transistor NPN 800 V 16 A 60 W Through Hole TO-3PF

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
FJAF6916TU	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
NPN	16 A
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
800 V	3V @ 2.5A, 10A
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
1mA	6 @ 8.5A, 5V
Power - Max:	Frequency - Transition:
60 W	-
Operating Temperature:	Mounting Type:
150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-3P-3 Full Pack	TO-3PF
Base Product Number:	
FJAF6916	

Environmental & Export classification

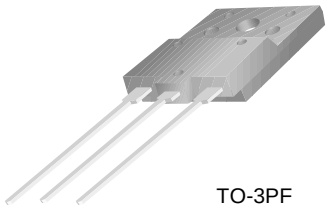
Moisture Sensitivity Level (MSL):	REACH Status:
1 (Unlimited)	REACH Unaffected
ECCN:	HTSUS:
EAR99	8541.29.0095

FAIRCHILD
SEMICONDUCTOR®

FJAF6916

High Voltage Color Display Horizontal Deflection Output

- High Collector-Base Breakdown Voltage : BV_{CBO} = 1700V
- Low Saturation Voltage : V_{CE}(sat) = 3V (Max.)
- For Color Monitor



TO-3PF

1
1.Base 2.Collector 3.Emitter

NPN Triple Diffused Planar Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Rating	Units
V_{CBO}	Collector-Base Voltage	1700	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	16	A
I_{CP}*	Collector Current (Pulse)	30	A
P_C	Collector Dissipation	60	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

* Pulse Test: PW=300μs, duty Cycle=2% Pulsed

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
I_{CES}	Collector Cut-off Current	V_{CB}=1400V, R_{BE}=0			1	mA
I_{CBO}	Collector Cut-off Current	V_{CB}=800V, I_E=0			10	μA
I_{EBO}	Emitter Cut-off Current	V_{EB}=4V, I_C=0			1	mA
BV_{CBO}	Collector-Base Breakdown Voltage	I_C=500μA, I_E=0	1700			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C=5mA, I_B=0	800			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E=500μA, I_C=0	6			V
h_{FE1} h_{FE2}	DC Current Gain	V_{CE}=5V, I_C=1A V_{CE}=5V, I_C=8.5A	10 6		 9	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C=10A, I_B=2.5A			3	V
V_{BE}(sat)	Base-Emitter Saturation Voltage	I_C=10A, I_B=2.5A			1.5	V
t_{STG}*	Storage Time	V_{CC}=200V, I_C=8A, R_L=25Ω I_{B1}=1.6A, I_{B2}=-3.2A			4	μs
t_F*	Fall Time				0.3	μs

* Pulse Test: PW=20μs, duty Cycle=1% Pulsed

Thermal Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Typ	Max	Units
$R_{\theta jC}$	Thermal Resistance, Junction to Case		2.08	°C/W

Typical Characteristics

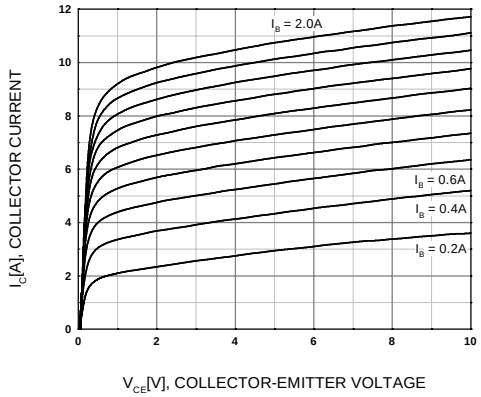


Figure 1. Static Characteristics

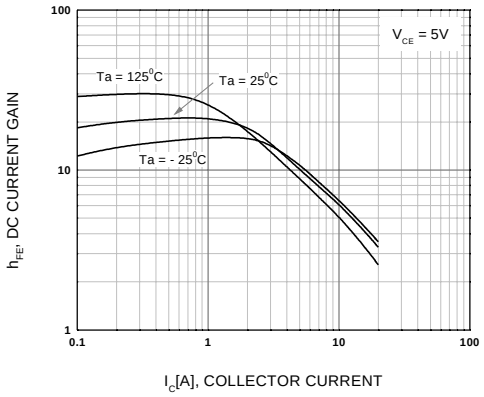


Figure 2. DC Current Gain

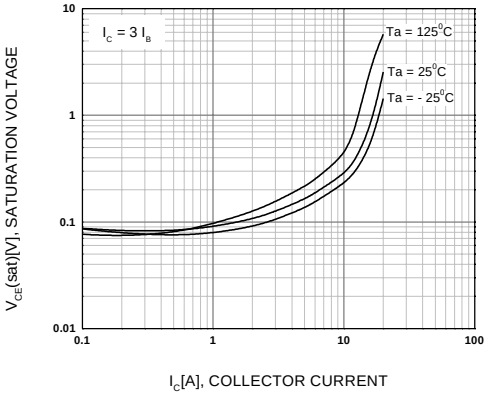


Figure 3. Collector-Emitter Saturation Voltage

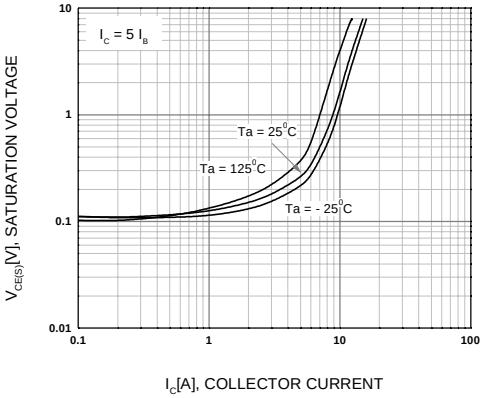


Figure 4. Collector-Emitter Saturation Voltage

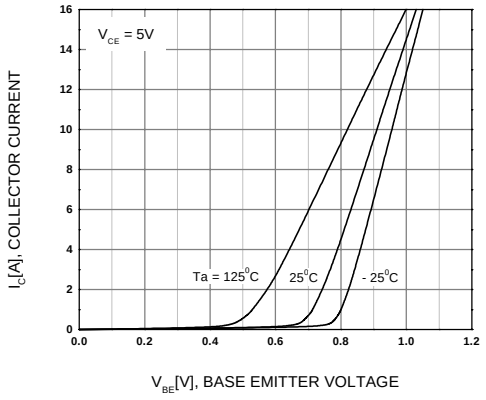


Figure 5. Base-Emitter On Voltage

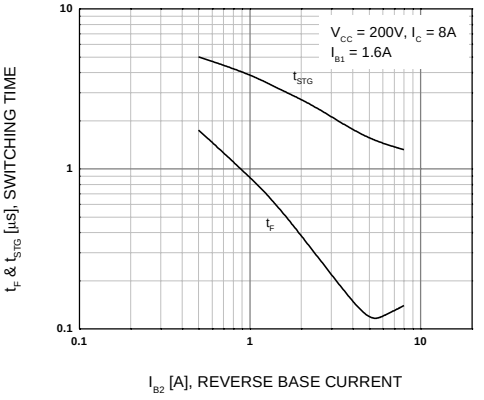


Figure 6. Resistive Load Switching Time

Typical Characteristics (Continued)

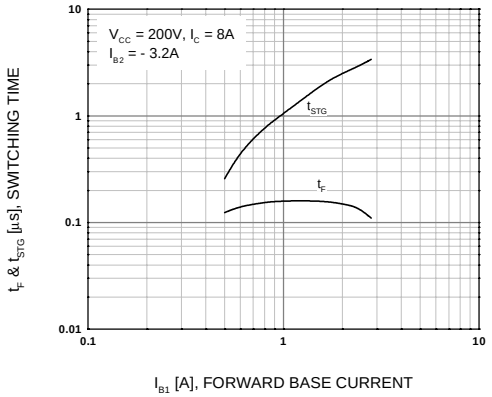


Figure 7. Resistive Load Switching Time

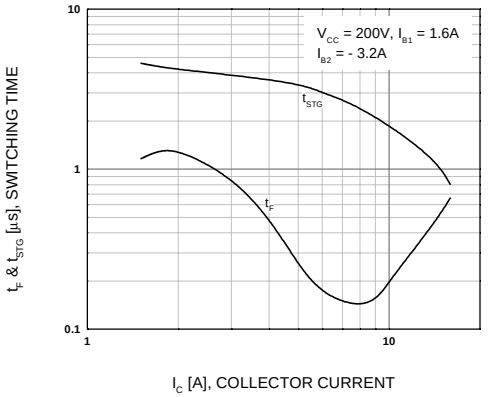


Figure 8. Resistive Load Switching Time

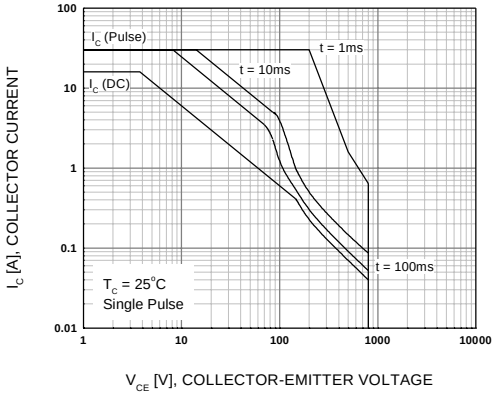


Figure 9. Forward Bias Safe Operating Area

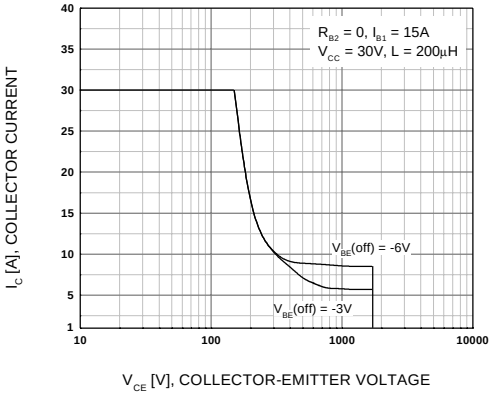


Figure 10. Reverse Bias Safe Operating Area

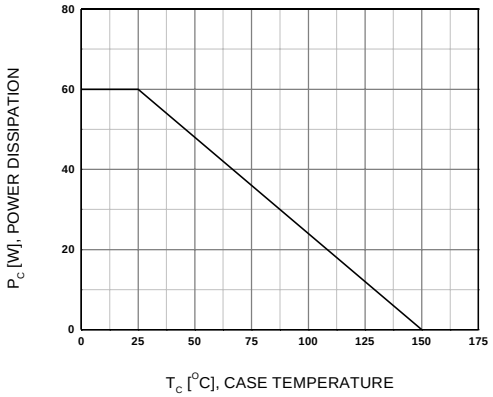
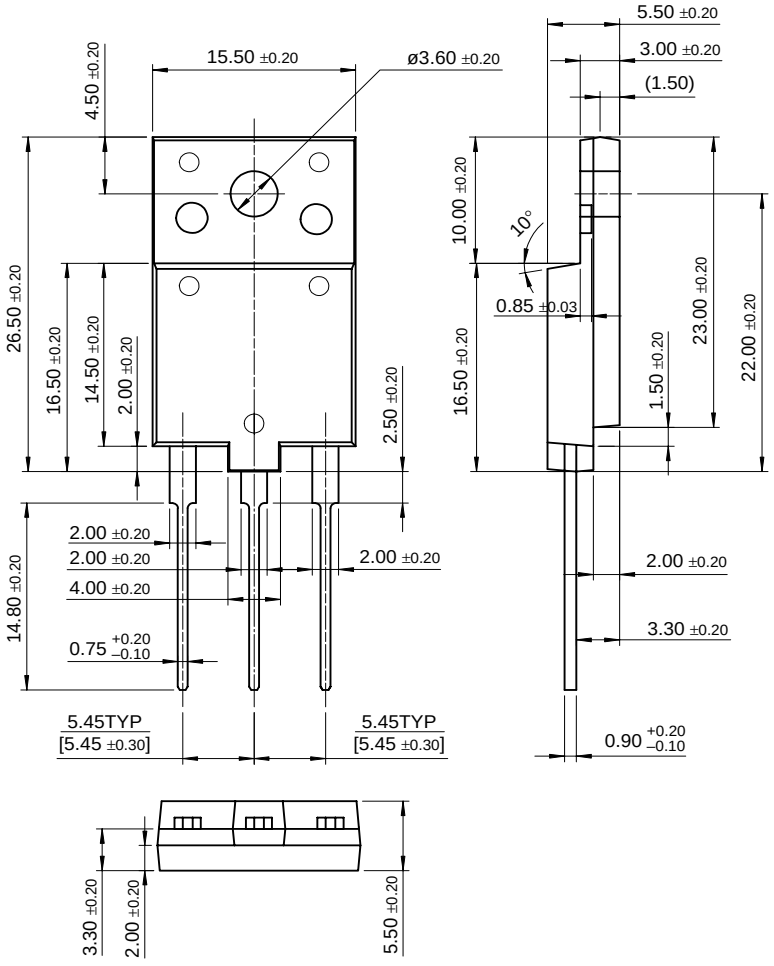


Figure 11. Power Derating

Package Demensions

TO-3PF



Dimensions in Millimeters

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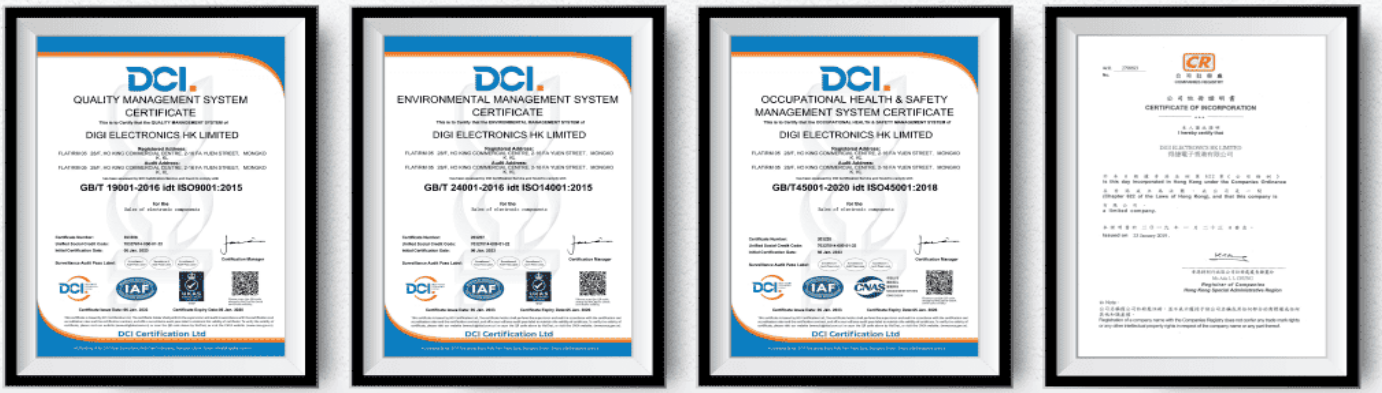

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