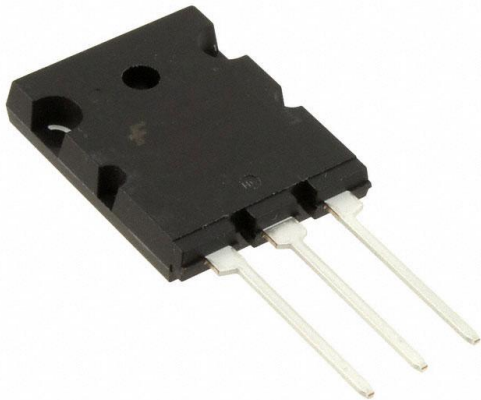


FJL6920YDTU Datasheet

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<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	FJL6920YDTU-DG
Manufacturer	onsemi
Manufacturer Product Number	FJL6920YDTU
Description	TRANS NPN 800V 20A TO264-3
Detailed Description	Bipolar (BJT) Transistor NPN 800 V 20 A 200 W Through Hole TO-264-3



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

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Purchase and inquiry

Manufacturer Product Number:

FJL6920YDTU

Series:

-

Transistor Type:

NPN

Voltage - Collector Emitter Breakdown (Max):

800 V

Current - Collector Cutoff (Max):

1mA

Power - Max:

200 W

Operating Temperature:

150°C (TJ)

Package / Case:

TO-264-3, TO-264AA

Base Product Number:

FJL692

Manufacturer:

onsemi

Product Status:

Obsolete

Current - Collector (Ic) (Max):

20 A

Vce Saturation (Max) @ Ib, Ic:

3V @ 2.75A, 11A

DC Current Gain (hFE) (Min) @ Ic, Vce:

5.5 @ 11A, 5V

Frequency - Transition:

-

Mounting Type:

Through Hole

Supplier Device Package:

TO-264-3

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

REACH Status:

REACH Unaffected

HTSUS:

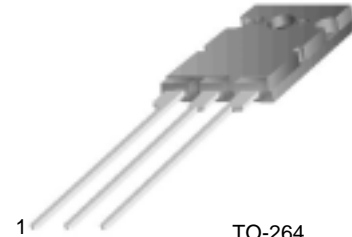
8541.29.0095



FJL6920

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-264
1.Base 2.Collector 3.Emitter

NPN Triple Diffused Planar Silicon Transistor

Absolute Maximum Ratings $T_C=25^\circ C$ 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)	20	A
I_{CP}^*	Collector Current (Pulse)	30	A
P_C	Collector Dissipation	200	W
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ C$

* Pulse Test: $PW=300\mu s$, duty Cycle=2% Pulsed

Electrical Characteristics $T_C=25^\circ C$ 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	$I_C=500\mu A, I_E=0$	1700			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=5mA, I_B=0$	800			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E=500\mu A, I_C=0$	6			V
h_{FE1} h_{FE2}	DC Current Gain	$V_{CE}=5V, I_C=1A$ $V_{CE}=5V, I_C=11A$	8 5.5		8.5	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=11A, I_B=2.75A$			3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=11A, I_B=2.75A$			1.5	V
t_{STG}^*	Storage Time	$V_{CC}=200V, I_C=10A, R_L=20\Omega$			3	μs
t_F^*	Fall Time	$I_{B1}=2.0A, I_{B2}=-4.0A$		0.15	0.2	μs

* Pulse Test: $PW=20\mu s$, duty Cycle=1% Pulsed

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

Symbol	Parameter	Typ	Max	Units
$R_{\theta jC}$	Thermal Resistance, Junction to Case		0.625	$^\circ C/W$

Typical Characteristics

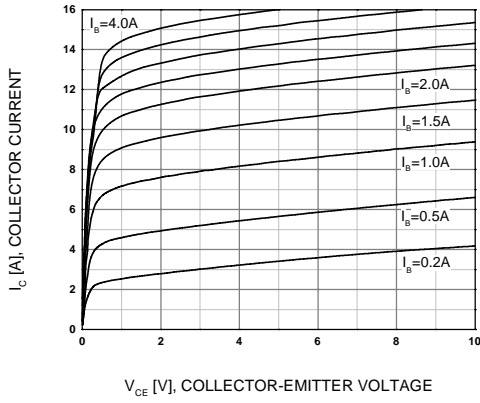


Figure 1. Static Characteristics

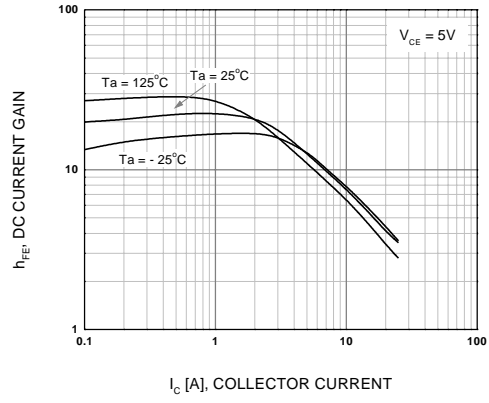


Figure 2. DC Current Gain

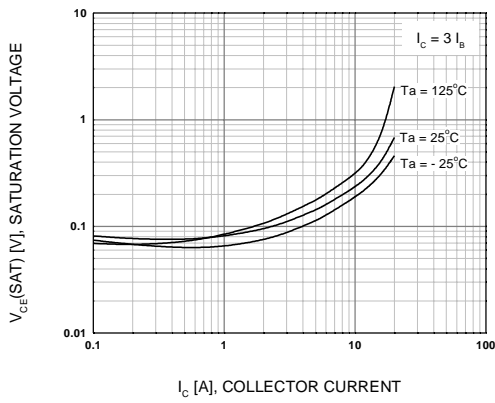


Figure 3. Collector-Emitter Saturation Voltage

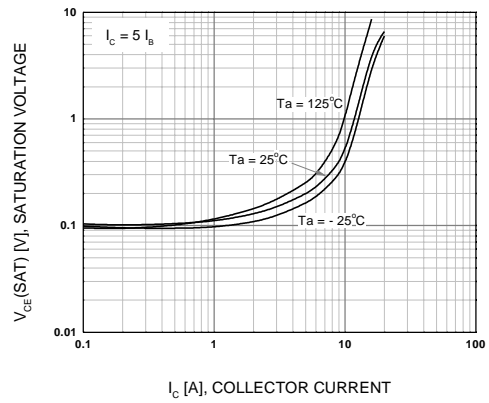


Figure 4. Collector-Emitter Saturation Voltage

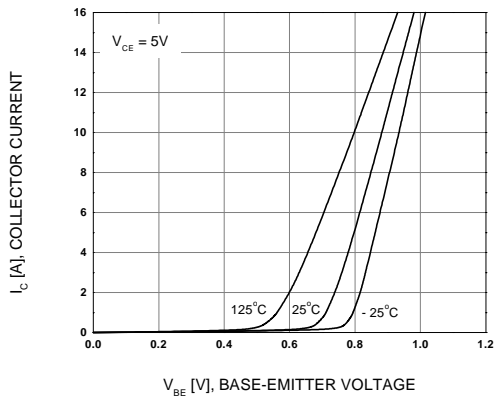


Figure 5. Base-Emitter On Voltage

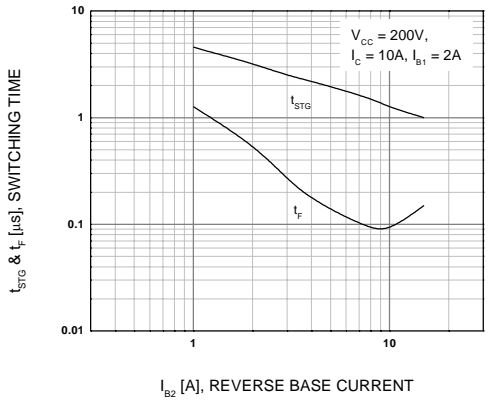


Figure 6. Resistive Load Switching Time

Typical Characteristics (Continued)

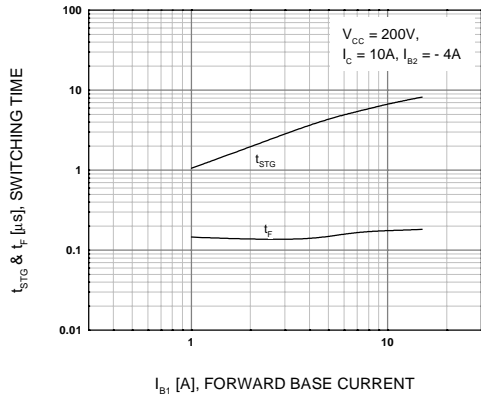


Figure 7. Resistive Load Switching Time

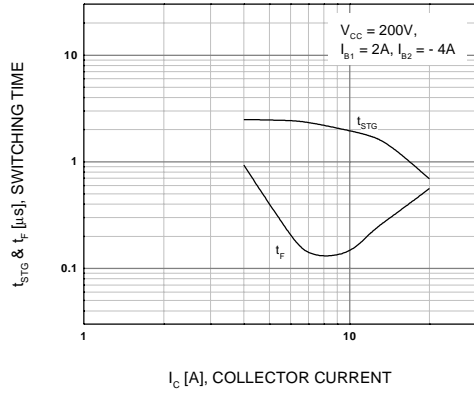


Figure 8. Resistive Load Switching Time

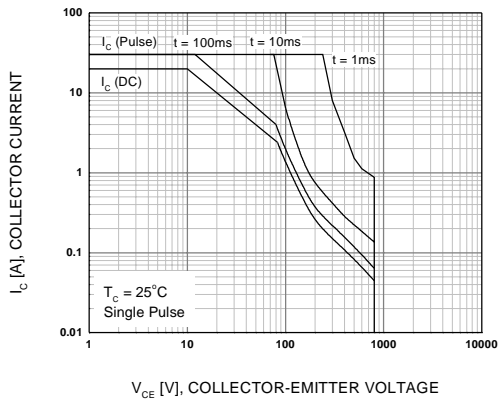


Figure 9. Forward Bias Safe Operating Area

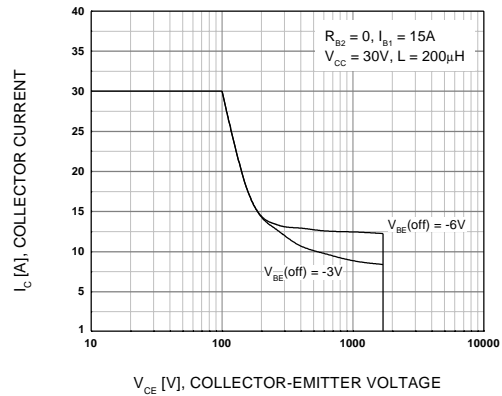


Figure 10. Reverse Bias Safe Operating Area

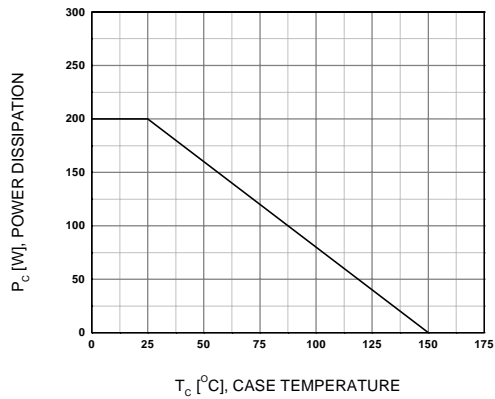
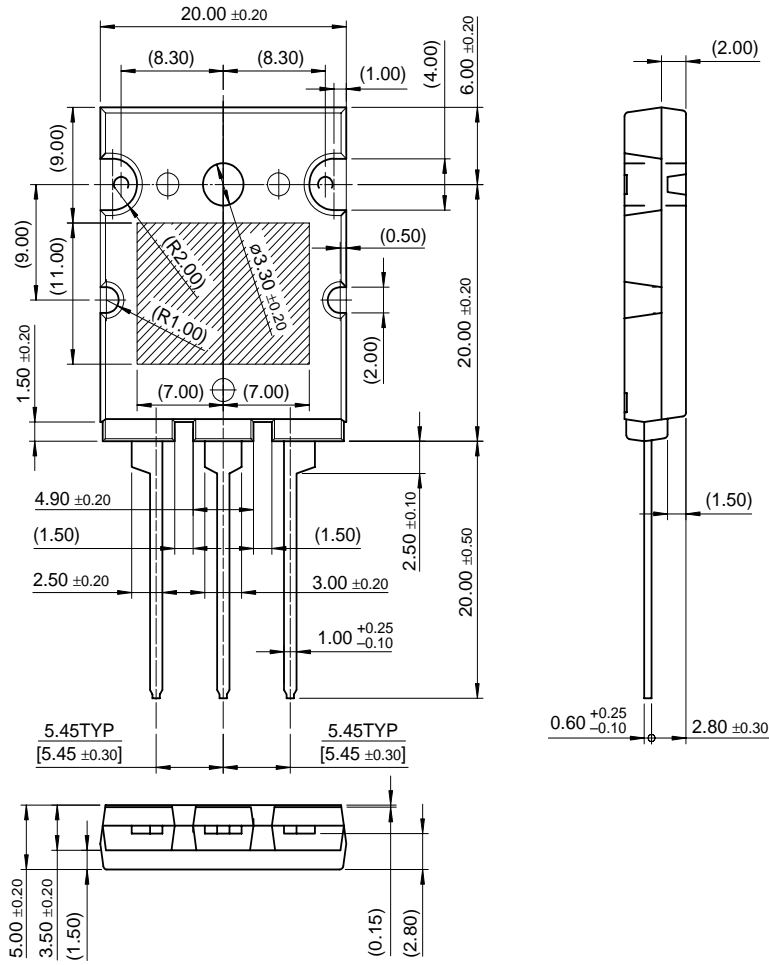


Figure 11. Power Derating

Package Demensions

TO-264



Dimensions in Millimeters

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E ² CMOS™	LittleFET™	Quiet Series™	VCX™
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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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