# FAIRCHILD

SEMICONDUCTOR

# **FJAF6916**

## High Voltage Color Display Horizontal **Deflection Output**

- High Collector-Base Breakdown Voltage : BV<sub>CBO</sub> = 1700V
  Low Saturation Voltage : V<sub>CE</sub>(sat) = 3V (Max.)
- For Color Monitor



1.Base 2.Collector 3.Emitter

## NPN Triple Diffused Planar Silicon Transistor

### Absolute Maximum Ratings T<sub>C</sub>=25°C unless otherwise noted

Symbol	Parameter	Rating	Units
V <sub>CBO</sub>	Collector-Base Voltage	1700	V
V <sub>CEO</sub>	Collector-Emitter Voltage	800	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current (DC)	16	А
I <sub>CP</sub> *	Collector Current (Pulse)	30	A
P <sub>C</sub>	Collector Dissipation	60	W
TJ	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C

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

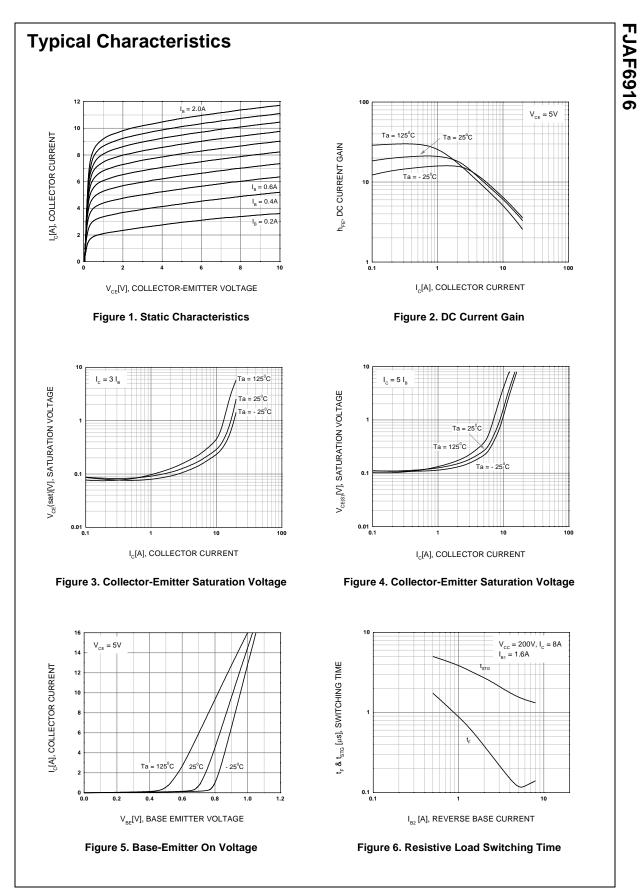
### Electrical Characteristics T<sub>C</sub>=25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Тур	Max	Units
I <sub>CES</sub>	Collector Cut-off Current	V <sub>CB</sub> =1400V, R <sub>BE</sub> =0			1	mA
I <sub>CBO</sub>	Collector Cut-off Current	V <sub>CB</sub> =800V, I <sub>E</sub> =0			10	μA
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB}=4V, I_{C}=0$			1	mA
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> =500μA, I <sub>E</sub> =0	1700			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> =5mA, I <sub>B</sub> =0	800			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> =500μA, I <sub>C</sub> =0	6			V
h <sub>FE1</sub>	DC Current Gain	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	10			
h <sub>FE2</sub>		V <sub>CE</sub> =5V, I <sub>C</sub> =8.5A	6		9	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> =10A, I <sub>B</sub> =2.5A			3	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> =10A, I <sub>B</sub> =2.5A			1.5	V
t <sub>STG</sub> *	Storage Time	$V_{CC}$ =200V, $I_{C}$ =8A, $R_{L}$ =25 $\Omega$			4	μs
t <sub>F</sub> *	Fall Time	I <sub>B1</sub> =1.6A, I <sub>B2</sub> =-3.2A			0.3	μs

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

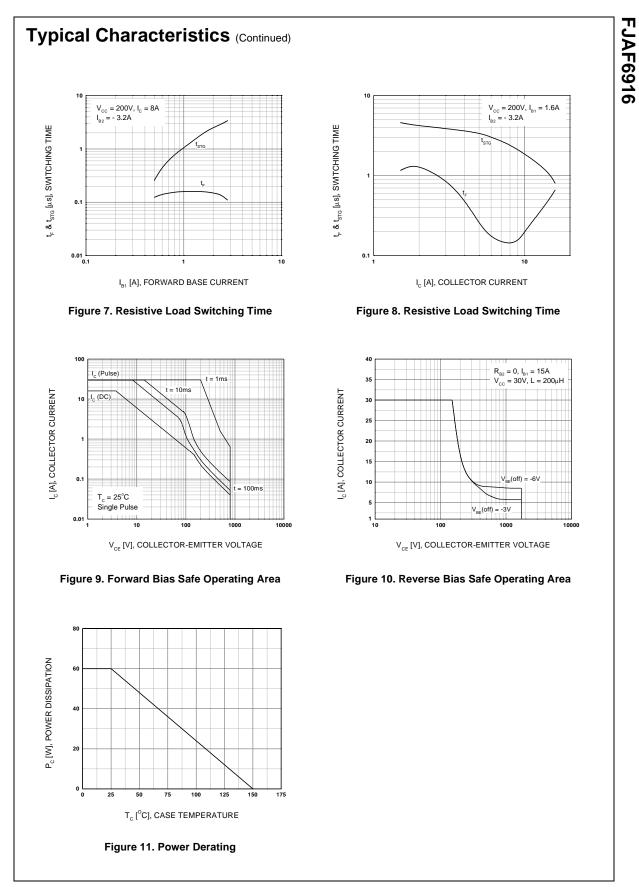
### **Thermal Characteristics** T<sub>C</sub>=25°C unless otherwise noted

Symbol	Parameter	Тур	Max	Units
$R_{ extsf{ heta}jC}$	Thermal Resistance, Junction to Case 2.08 °C/		°C/W	



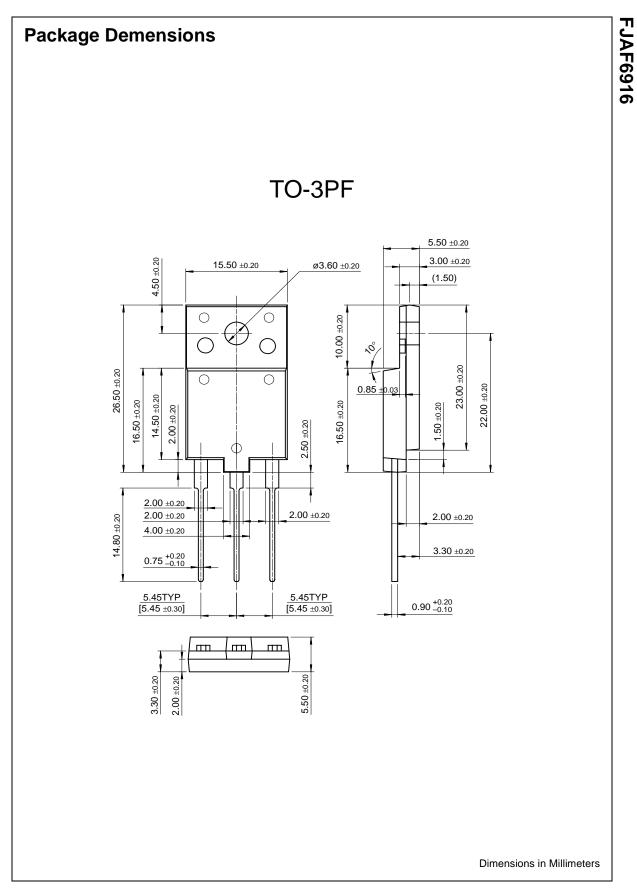
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