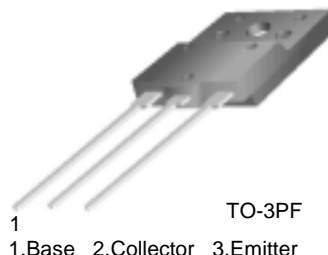


FJAF6812

High Voltage Color Display Horizontal Deflection Output

- High Collector-Base Breakdown Voltage : $BV_{CBO} = 1500V$
- High Switching Speed : $t_f(\text{typ.}) = 0.1\mu s$
- For Color Monitor



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	1500	V
V_{CEO}	Collector-Emitter Voltage	750	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	12	A
I_{CP}^*	Collector Current (Pulse)	24	A
P_C	Collector Dissipation	60	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_{EBO}	Emitter-Base Breakdown Voltage	$I_E=500\mu A, I_C=0$	6			V
h_{FE1}	DC Current Gain	$V_{CE}=5V, I_C=1A$	10		40	
h_{FE2}		$V_{CE}=5V, I_C=8A$	5		8	
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C=8A, I_B=2A$			3	V
$V_{BE}(\text{sat})$	Base-Emitter Saturation Voltage	$I_C=8A, I_B=2A$			1.5	V
t_{STG}^*	Storage Time	$V_{CC}=200V, I_C=7A, R_L=30\Omega$			3	μs
t_F^*	Fall Time	$I_{B1}=1.4A, I_{B2}=-2.8A$			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	1.4	2.08	$^\circ C/W$

Typical Characteristics

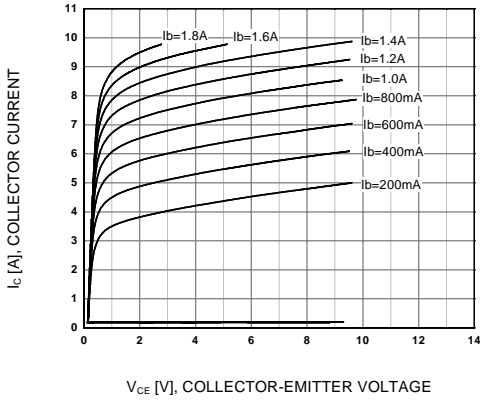


Figure 1. Static Characteristics

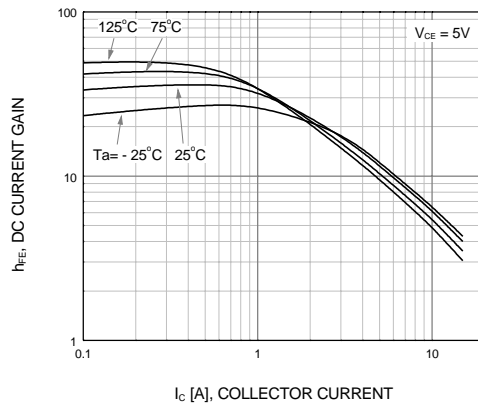


Figure 2. DC Current Gain

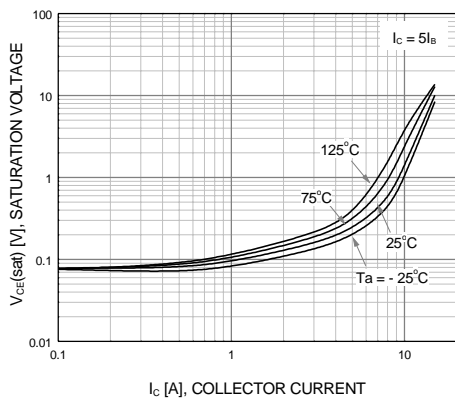


Figure 3. Collector-Emitter Saturation Voltage

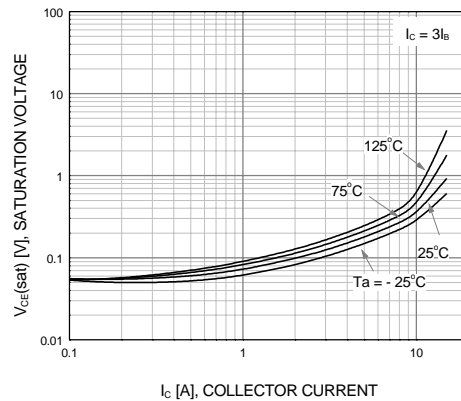


Figure 4. Collector-Emitter Saturation Voltage

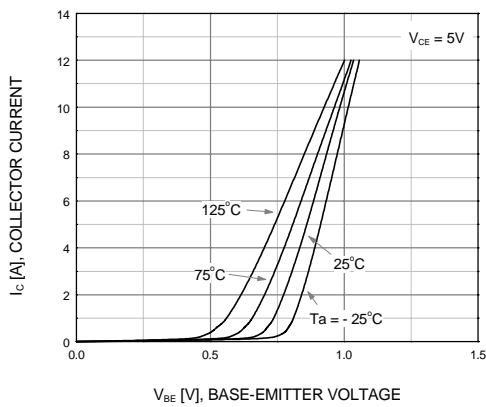


Figure 5. Base-Emitter On Voltage

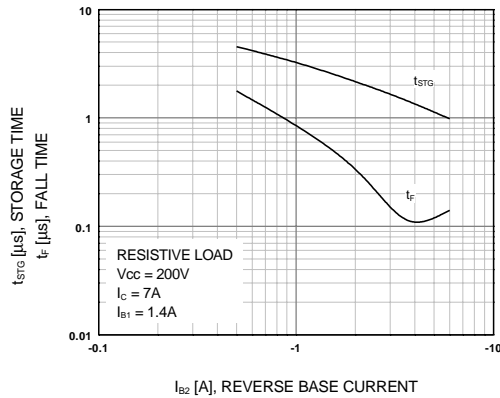


Figure 6. Switching Time

Typical Characteristics (Continued)

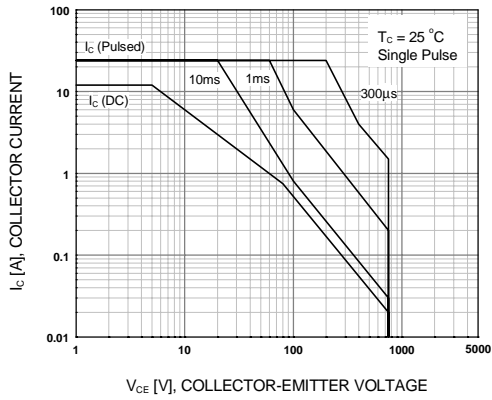


Figure 7. Forward Bias Safe Operating Area

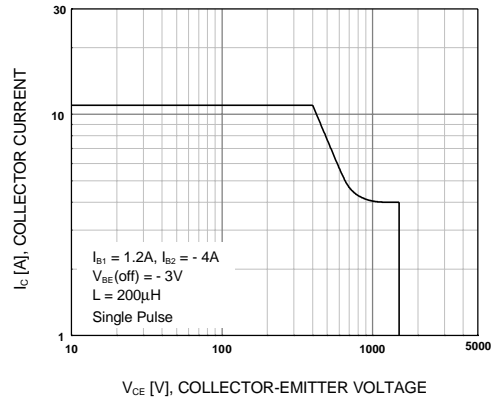


Figure 8. Reverse Bias Safe Operating Area

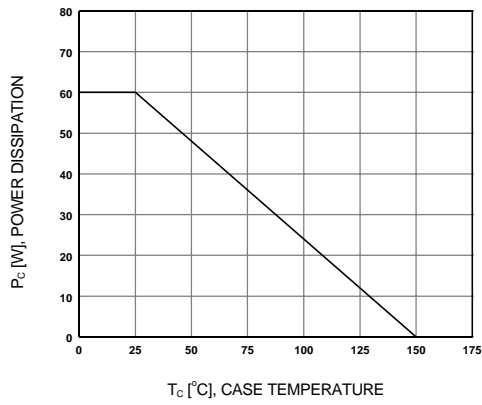


Figure 9. Power Derating

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