FAIRCHILD
SEMICONDUCTOR TM

KSC5802

High Voltage Color Display Horizontal Deflection Output (No Damper Diode)

- High Breakdown Voltage : BVCBO=1500V
- High Speed Switching : tF=0.1μs (Typ.)
- Wide S.O.A
- For C-Monitor(69KHz)

TO-3PF
1
1.Base 2.Collector 3.Emitter

NPN Triple Diffused Planar Silicon Transistor

Absolute Maximum Ratings TC=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	10	A
I_{CP}	Collector Current (Pulse)	30	A
P_C	Collector Dissipation (TC=25°C)	60	W
T_J	Junction Temperature	150	℃
T_{STG}	Storage Temperature	- 55 ~ 150	℃

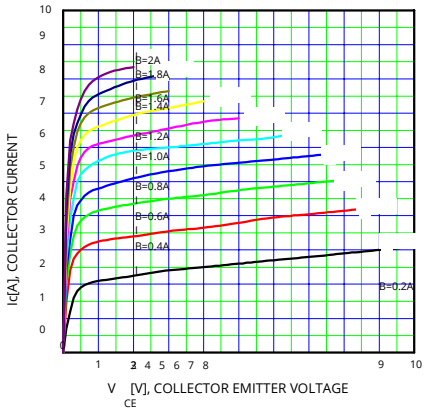
Electrical Characteristics TC=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CES}	Collector Cut-off Current	VCE = 1400V, VBE=0			1	mA
I_{CBO}	Collector Cut-off Current	VCB = 800V, IE = 0			10	uA
I_{EBO}	Emitter Cut-off Current	VEB = 4V, IC = 0			1	mA
h_{FE1}	DC Current Gain	VCE = 5V, IC = 1A	15		48	
h_{FE2}		VCE = 5V, IC = 6A	7		10	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	IC = 6A, IB = 1.5A			3	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	IC = 6A, IB = 1.5A			1.5	V
t_F	Fall Time	VCC = 200V, IC = 6A IB1 = 1.2A, IB2= - 2.4A RL = 33.3Ω		0.1	0.3	μs

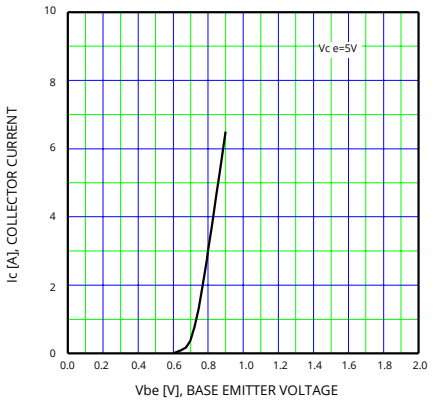
©2000 Fairchild Semiconductor International

Typical Characteristics

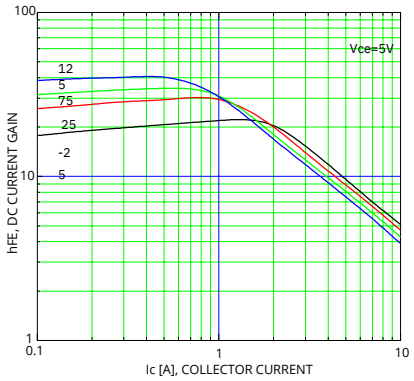
STATIC CHARACTERISTIC



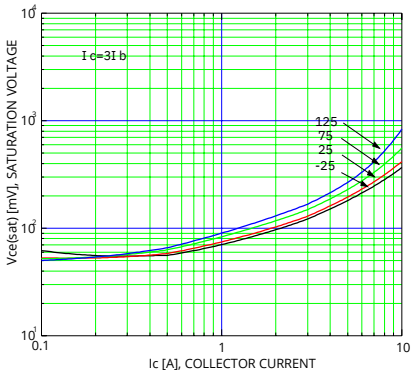
BASE EMITTER ON VOLTAGE



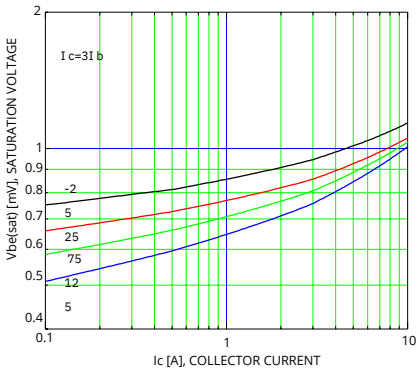
DC CURRENT GAIN



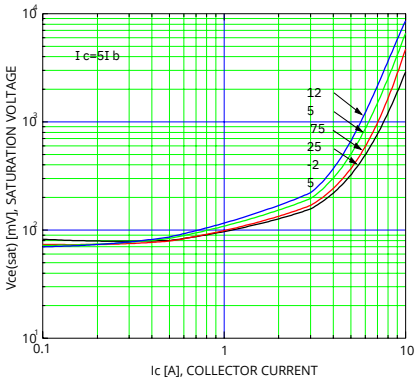
COLLECTOR-EMITTER SATURATION VOLTAGE 1



BASE-EMITTER SATURATION VOLTAGE 1



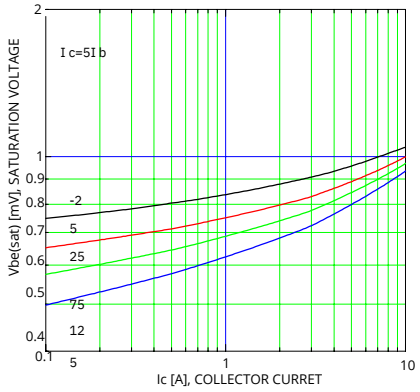
COLLECTOR-EMITTER SATURATION VOLTAGE 2



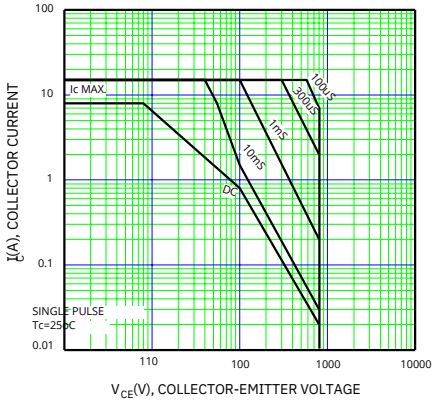
©2000 Fairchild Semiconductor International

Typical Characteristics (continued)

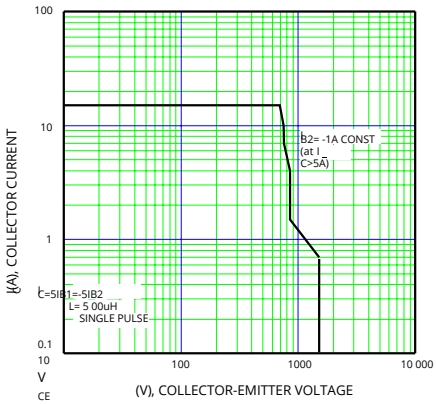
BASE-EMITTER SATURATION VOLTAGE 2



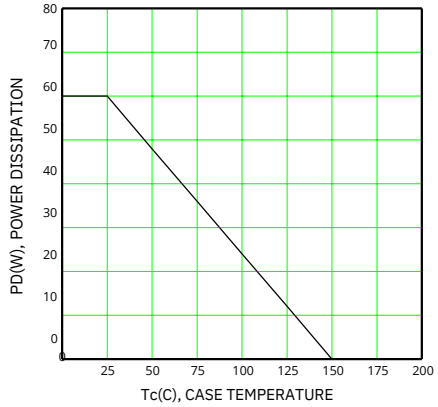
SAFE OPERATING AREA



REVERSE BIAS SAFE OPERATING AREA



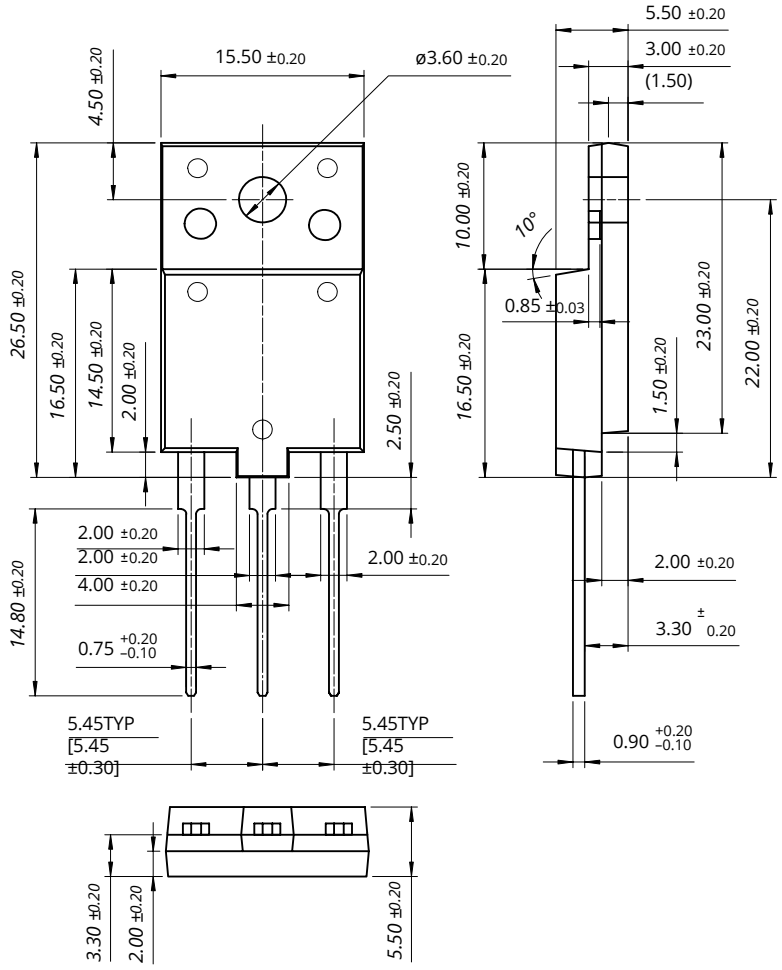
POWER DERATING



©2000 Fairchild Semiconductor International

Package Dimension

TO-3PF



©2000 Fairchild Semiconductor International

TRADEMARKS

The following are registered and unregistered trademarks Fairchild Semiconductor owns or is authorized to use and is not intended to be an exhaustive list of all such trademarks.

ACEx™
CoolFET™
CROSSVOLT™
E2CMOS™
FACT™
FACT Quiet Series™
FAST®
FASTr™
GTO™
HiSeC™
ISOPLANAR™
MICROWIRE™
POP™
PowerTrench™
QFET™
QS™
Quiet Series™
SuperSOT™-3
SuperSOT™-6
SuperSOT™-8
SyncFET™
TinyLogic™
UHC™
VCX™

D ISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF FAIRCHILD SEMICONDUCTOR INTERNATIONAL.
As used herein:

1. Life support devices or systems are devices or systems2. A critical component is any component of a life support which, (a) are intended for surgical implant into the body,device or system whose failure to perform can be or (b) support or sustain life, or (c) whose failure to performreasonably expected to cause the failure of the life support when properly used in accordance with instructions for usedevice or system, or to affect its safety or effectiveness. provided in the labeling, can be reasonably expected to result in significant injury to the user.

PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Des ig n	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

©2000 Fairchild Semiconductor International