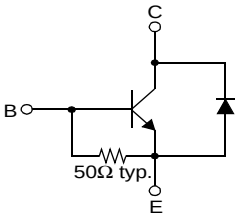
FAIRCHILD
SEMICONDUCTOR TM

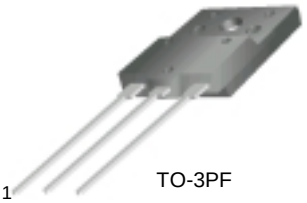
KSC5386

High Voltage Color Display Horizontal Deflection Output (Damper Diode Built In)

- High Collector-Base Breakdown Voltage : BV_{CBO}=1500V
- High Speed Switching : t_F=0.1μs (Typ)
- Wide S.O.A
- For C-Monitor (48KHz)

Equivalent Circuit





TO-3PF

1.Base 2.Collector 3.Emitter

NPN Triple Diffused Planar Silicon Transistor

Absolute Maximum Ratings T_C=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)	7	A
I_{CP}	Collector Current (Pulse)	16	A
P_C	Collector Dissipation (T_C=25°C)	50	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	−55 ~ 150	°C

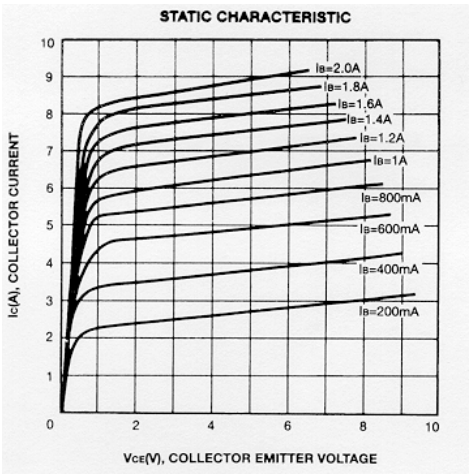
Electrical Characteristics T_C=25°C unless otherwise noted

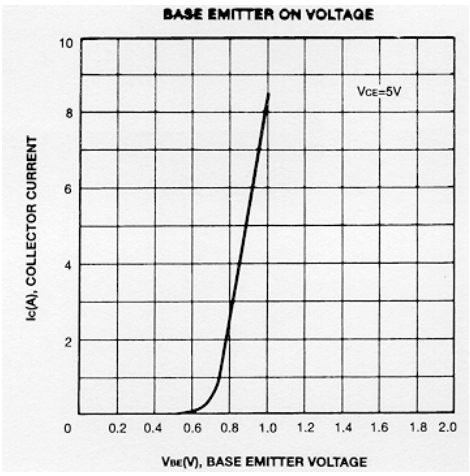
Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CES}	Collector Cut-off Current	V_{CE} = 1400V, R_{BE} = 0			1	mA
I_{CBO}	Collector Cut-off Current	V_{CB} = 800V, I_E = 0			10	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 4V, I_C = 0	40		250	mA
h_{FE}	DC Current Gain	V_{CE} = 5V, I_C = 1.0A	8		22	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C = 5A, I_B = 1.2A			4.2	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C = 5A, I_B = 1.2A			1.5	V
V_F	Damper Diode Turn On Voltage	I_F = 6A			2	V
t_F	Fall Time	V_{CC} = 200V, I_C = 4A, I_{B1} = 0.8A, I_{B2} = -1.6A, R_L = 50Ω			0.2	μs

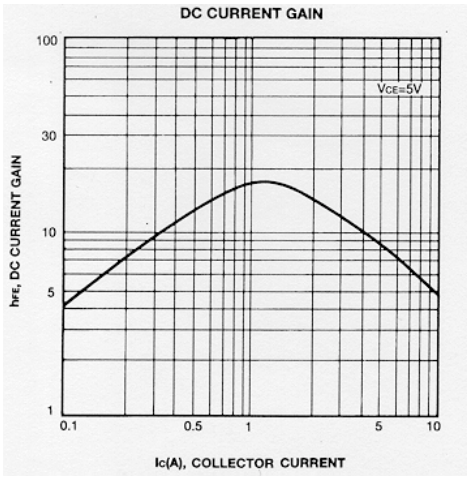
Thermal Characteristics T_C=25°C unless otherwise noted

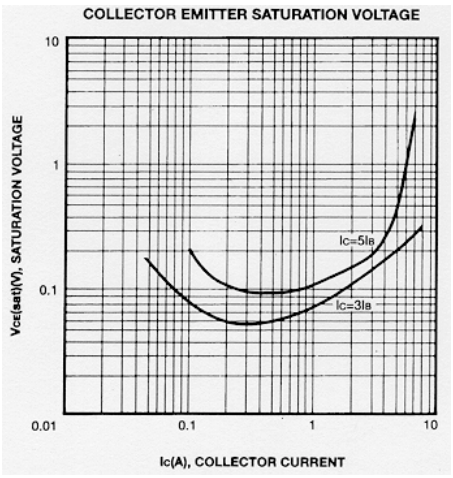
Symbol	Item	Max	Unit
$R_{\theta jc}$	Thermal Resistance, Junction to Case	2.37	°C/W

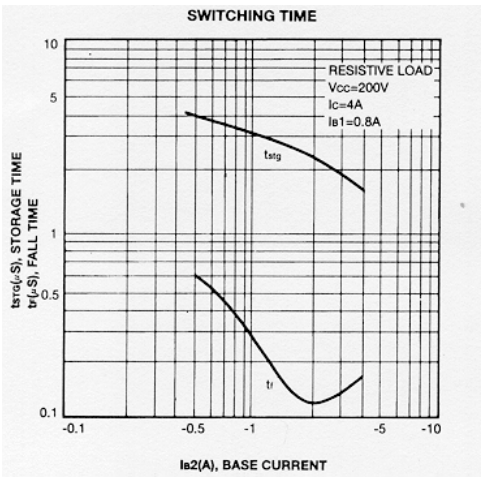
Typical Characteristics

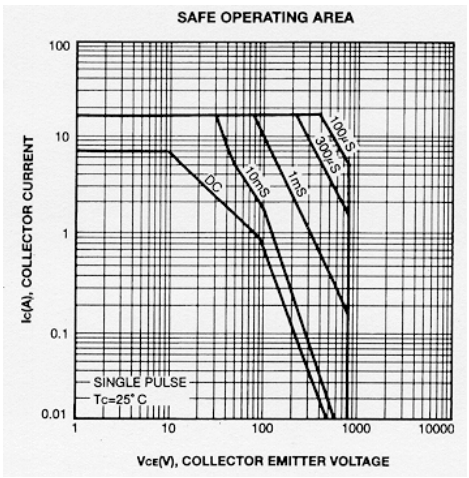




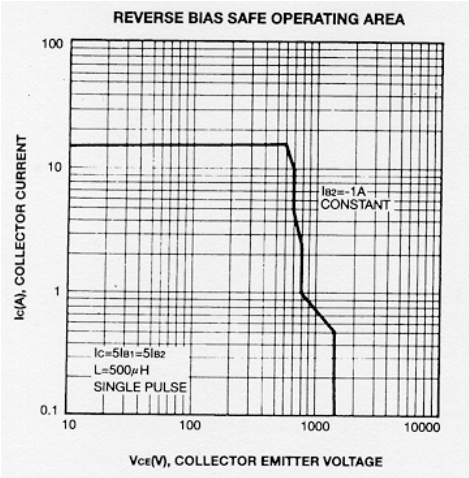


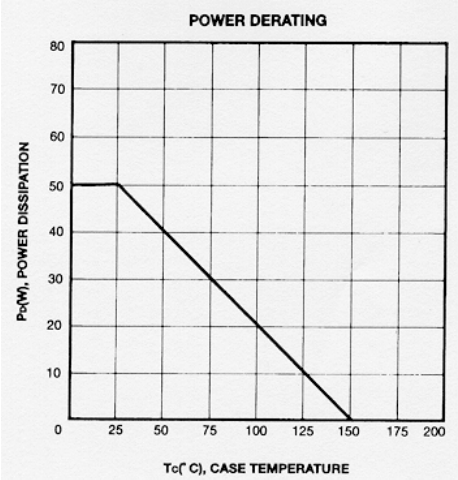






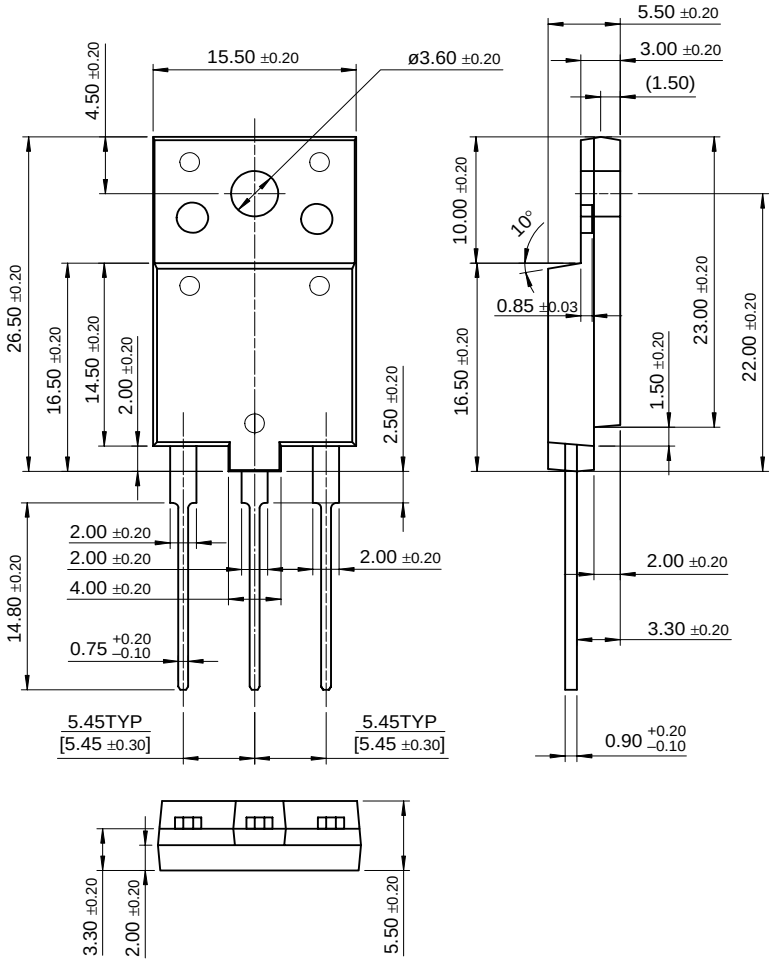
Typical Characteristics (continued)





Package Dimensions

TO-3PF



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