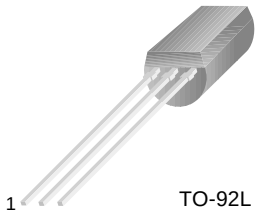
FAIRCHILD
SEMICONDUCTOR®

KSC2383

Color TV Audio Output & Color TV Vertical Deflection Output



TO-92L

1. Emitter 2. Collector 3. Base

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	1	A
I_B	Base Current	0.5	A
P_C	Collector Power Dissipation	900	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CBO}	Collector Cut-off Current	V_{CB}=150V, I_E=0			1	μA
I_{EBO}	Emitter Cut-off Current	V_{EB}=6V, I_C=0			1	μA
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C=10mA, I_B=0	160			V
h_{FE}	DC Current Gain	V_{CE}=5V, I_C=200mA	60		320	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C=500mA, I_B=50mA			1.5	V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE}=5V, I_C=5mA	0.45		0.75	V
f_T	Current Gain Bandwidth Product	V_{CE}=5V, I_C=200mA	20	100		MHz
C_{ob}	Output Capacitance	V_{CB}=10V, I_E=0, f=1MHz			20	pF

h_{FE} Classification

Classification	R	O	Y
h_{FE}	60 ~ 120	100 ~ 200	160 ~ 320

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Typical Characteristics

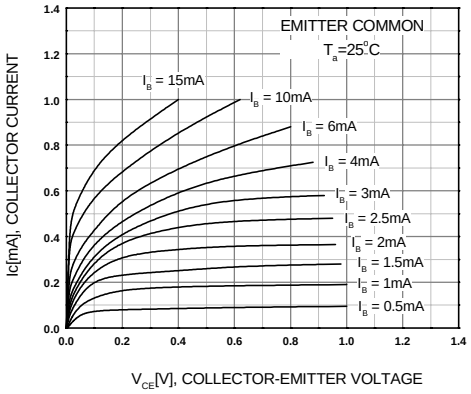


Figure 1. Static Characteristic

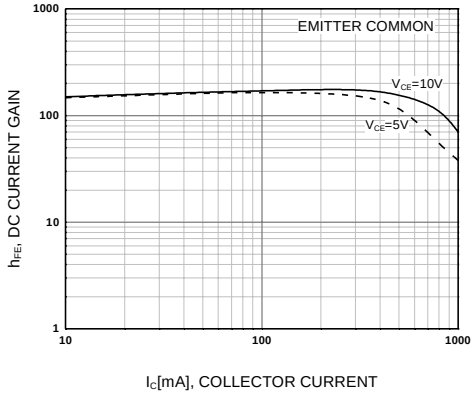


Figure 2. DC current Gain

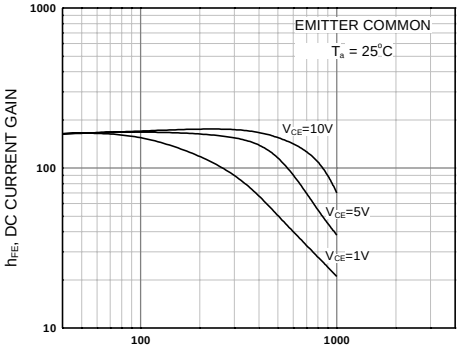


Figure 3. DC current Gain

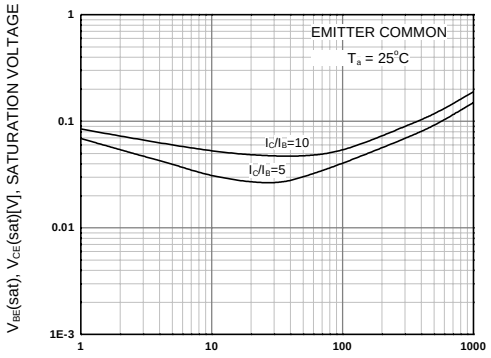


Figure 4. Collector-Emitter Saturation Voltage

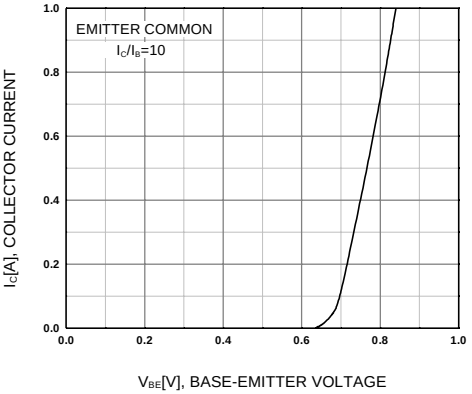


Figure 5. Base-Emitter On Voltage

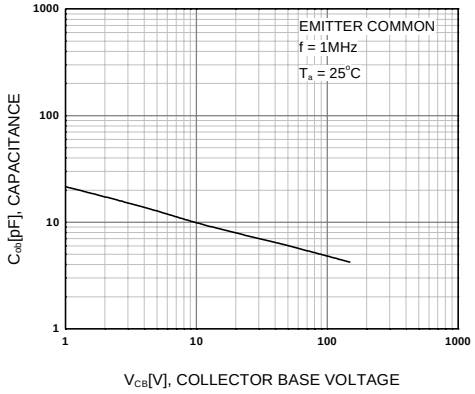


Figure 6. Collector Output Capacitance

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Typical Characteristics (Continued)

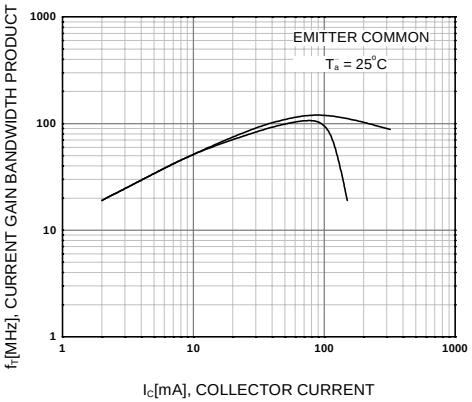


Figure 7. Current Gain Bandwidth Product

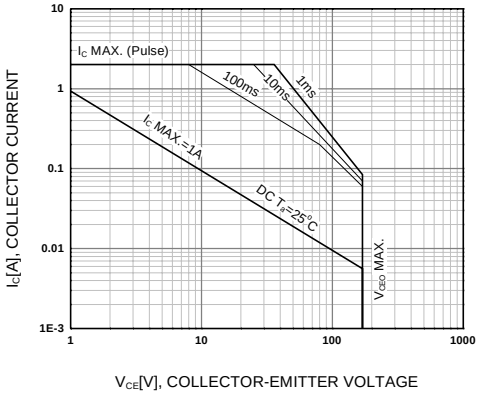
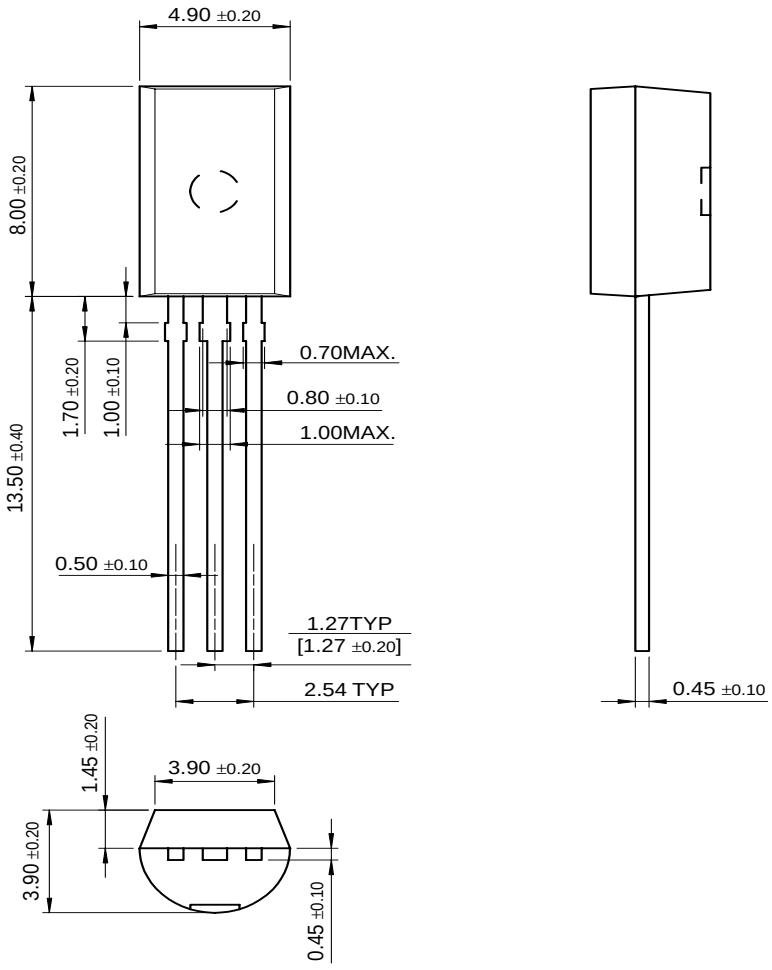


Figure 8. Safe Operating Area

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Package Dimensions

TO-92L



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E^2CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I^2C™	OCX™	RapidConfigure™	UHC™
Across the board. Around the world.™		OCXPro™	RapidConnect™	UltraFET®
The Power Franchise™		OPTOLOGIC®	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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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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