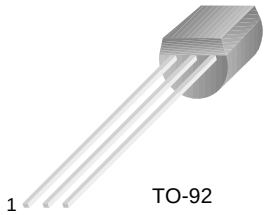
FAIRCHILD
SEMICONDUCTOR®

KSE13001

Color TV Chroma Output

- Collector-Base Voltage : V_{CBO}=400V
- Current Gain Bandwidth Product : f_T=50MHz (TYP.)



TO-92

1. Base 2. Collector 3. Emitter

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	100	mA
P_C	Collector Power Dissipation	600	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
BV_{CBO}	Collector-Base Breakdown Voltage	I_C=100μA, I_E=0	400			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C=5mA, I_B=0	400			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E=100μA, I_C=0	7			V
I_{CBO}	Collector Cut-off Current	V_{CB}=200V, I_E=0			0.1	μA
h_{FE}	DC Current Gain	V_{CE}=10V, I_C=20mA	40		80	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C=10mA, I_B=1mA			0.5	V
f_T	Current Gain Bandwidth Product	V_{CE}=30V, I_C=10mA		50		MHz
C_{ob}	Output Capacitance	V_{CB}=10V, I_E=0, f=1MHz		4		pF

h_{FE} Classification

Classification	R	O
h_{FE}	40 ~ 65	55 ~ 80

Typical Characteristics

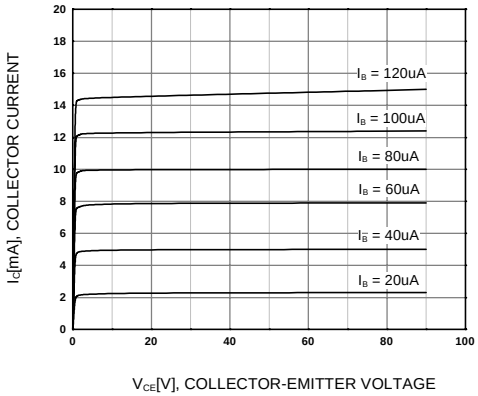


Figure 1. Static Characteristic

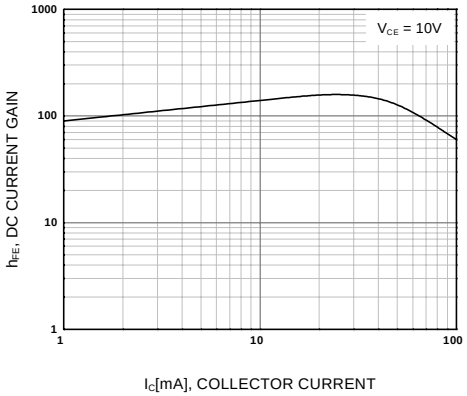


Figure 2. DC current Gain

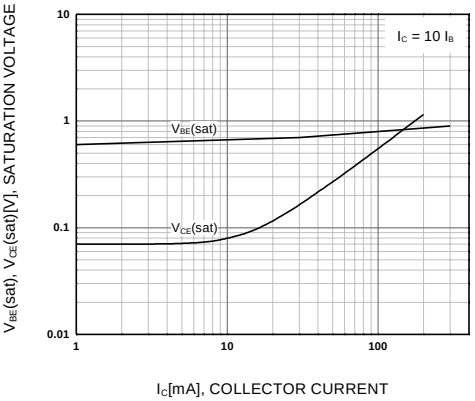


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

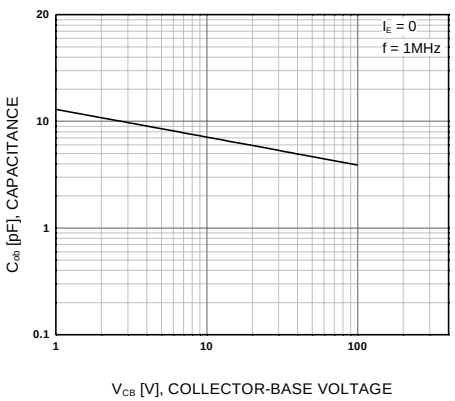


Figure 4. Collector Output Capacitance

Package Demensions

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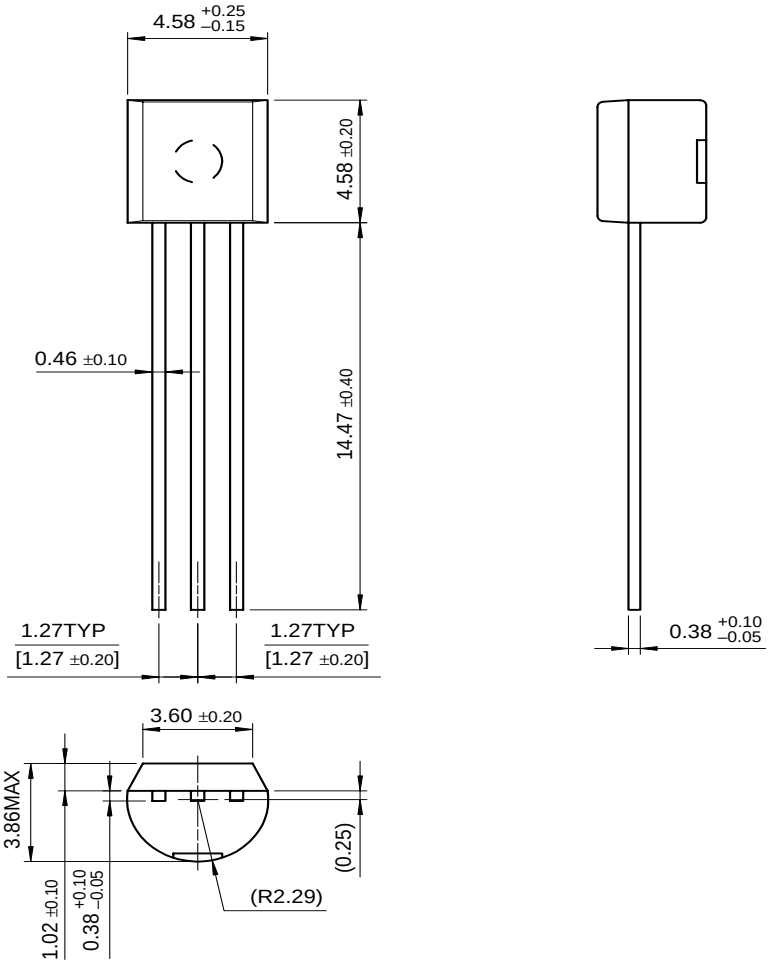

Dimensions in Millimeters

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EcoSPARK™	ISOPLANAR™	QS™	TruTranslation™
E^2CMOS™	LittleFET™	QT Optoelectronics™	TinyLogic™
EnSigna™	MicroFET™	Quiet Series™	UHC™
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