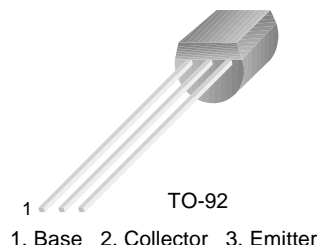


KSE13001

KSE13001

Color TV Chroma Output

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



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ C$ 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	$^\circ C$
T_{STG}	Storage Temperature	-55 ~ +150	$^\circ C$

Electrical Characteristics $T_a=25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=100\mu A, I_E=0$	400			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=5mA, I_B=0$	400			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E=100\mu A, I_C=0$	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

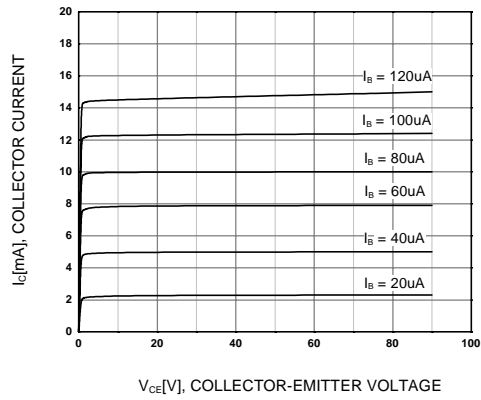


Figure 1. Static Characteristic

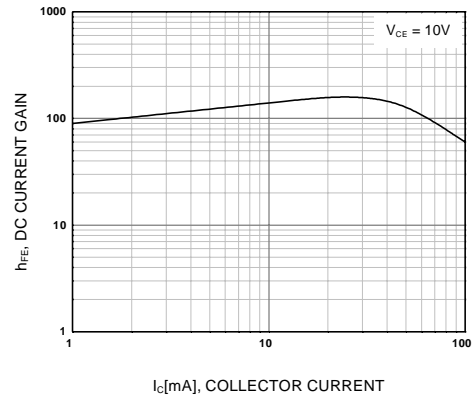


Figure 2. DC current Gain

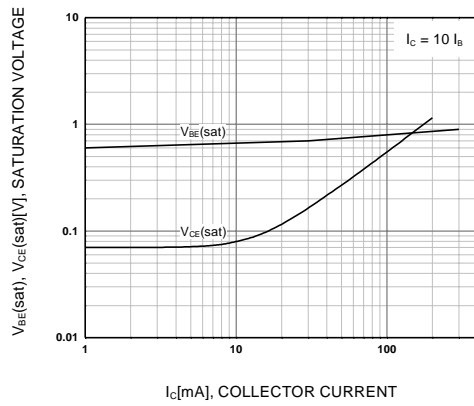


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

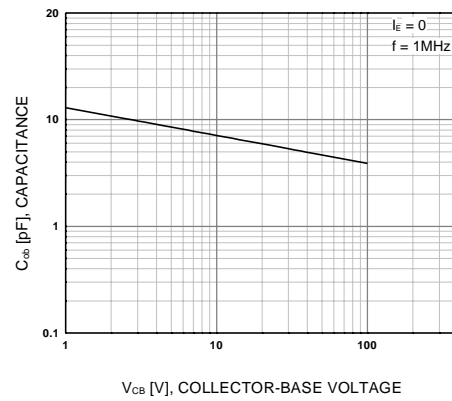
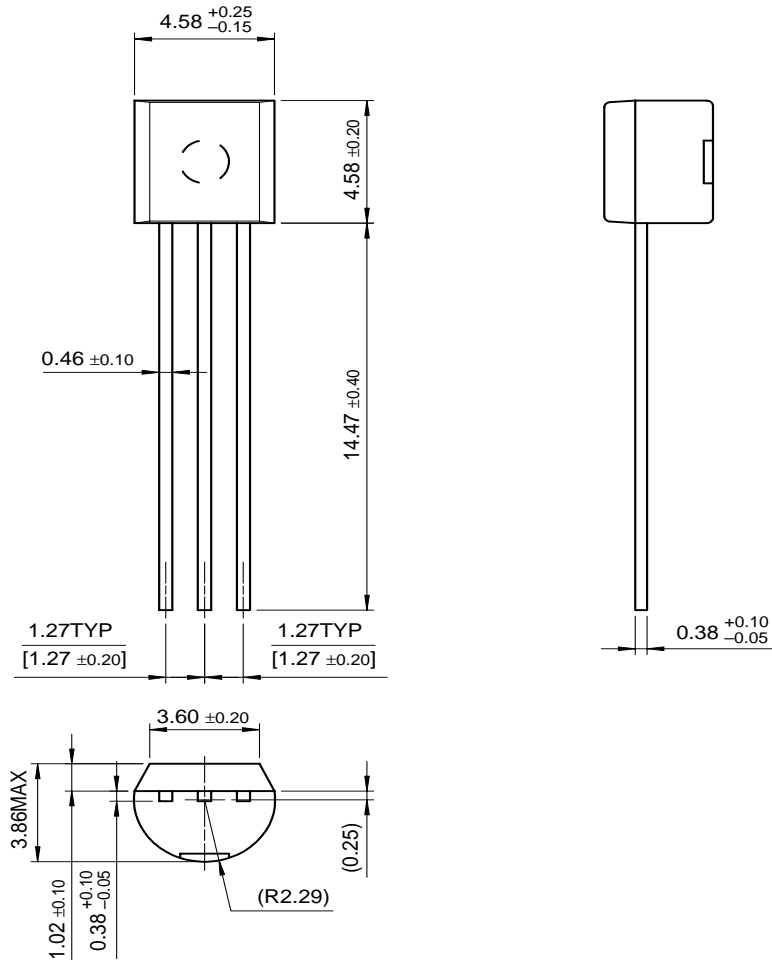


Figure 4. Collector Output Capacitance

Package Dimensions

TO-92



Dimensions in Millimeters

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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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.

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Applications

Color TV Chroma Output

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Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
KSE13001H1BU	Full Production	\$0.054	TO-92	3	BULK
KSE13001H1MBU	Full Production	\$0.054	TO-92	3	BULK
KSE13001H2BU	Full Production	\$0.054	TO-92	3	BULK

* 1,000 piece Budgetary Pricing

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