

### **KSA1370**

### Crt Display, Video Output

- High Voltage 
  Low Reverse Transfer Capacitance :  $C_{re}$ = 1.7pF



1. Emitter 2. Collector 3. Base

## **PNP Epitaxial Silicon Trnsistor**

### **Absolute Maximum Ratings** $T_a$ =25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V <sub>CBO</sub>	Collector-Base Voltage	-200	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-200	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current (DC)	-100	mA
I <sub>CP</sub>	Collector Current (Pulse)	-200	mA
P <sub>C</sub>	Collector Power Dissipation	1.0	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C

### **Electrical Characteristics** $T_a$ =25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	$I_{C}=-10\mu A,\ I_{E}=0$	-200			V
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	$I_C = -1 \text{mA}, I_B = 0$	-200			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	$I_{E}$ = -10 $\mu$ A, $I_{C}$ =0	-5			V
I <sub>CBO</sub>	Collector Cut-off Current	V <sub>CB</sub> = -150V, I <sub>E</sub> =0			-0.1	μΑ
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB}$ = -4V, $I_{C}$ =0			-0.1	μΑ
h <sub>FE</sub>	DC Current Gain	$V_{CE} = -10V, I_{C} = -10mA$	100		320	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	$I_C$ = -20mA, $I_B$ = -2mA			-0.6	V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	$I_C$ = -20mA, $I_B$ = -2mA			-1.0	V
f <sub>T</sub>	Current Gain Bandwidth Product	$V_{CE} = -30V, I_{C} = -10mA$		150		MHz
C <sub>ob</sub>	Output Capacitance	V <sub>CB</sub> = -30V, f=1MHz		2.6		pF
C <sub>re</sub>	Reverse Transfer Capacitance	V <sub>CB</sub> = -30V, f=1MHz		1.7		pF

## **Typical Characteristics**

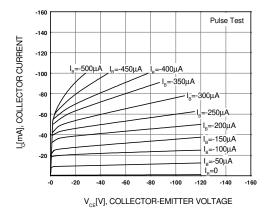


Figure 1. Static Characteristic

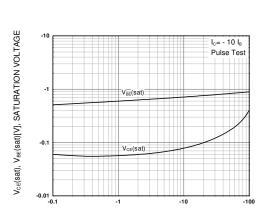


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

Ic[mA], COLLECTOR CURRENT

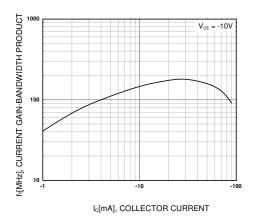


Figure 5. Current Gain Bandwidth Product

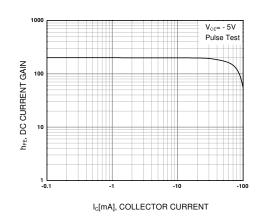


Figure 2. DC current Gain

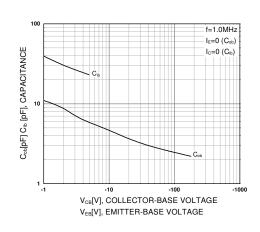


Figure 4. Collector Output Capacitance

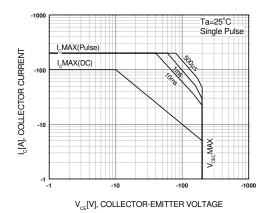


Figure 6. Safe Operating Area

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# Typical Characteristics (Continued)

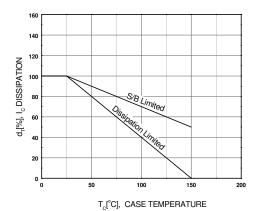
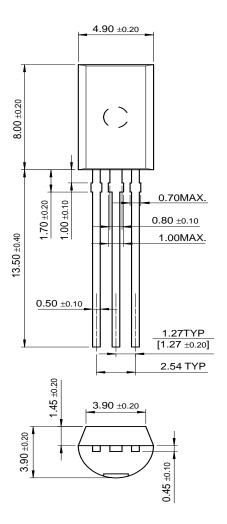


Figure 7. Derating Curve of Safe Operating Areas



## **Package Dimensions**

## TO-92L





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E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	$I^2C^{TM}$	OCXTM	RapidConfigure™	UHC™
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The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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