

KSA11500TA Datasheet

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DiGi Electronics Part Number	KSA11500TA-DG
Manufacturer	onsemi
Manufacturer Product Number	KSA11500TA
Description	TRANS PNP 20V 0.5A TO92S
Detailed Description	Bipolar (BJT) Transistor PNP 20 V 500 mA 300 mW Through Hole TO-92S



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Purchase and inquiry

Manufacturer Product Number:

KSA11500TA

Series:

-

Transistor Type:

PNP

Voltage - Collector Emitter Breakdown (Max):

20 V

Current - Collector Cutoff (Max):

100nA (ICBO)

Power - Max:

300 mW

Operating Temperature:

150°C (TJ)

Package / Case:

TO-226-3, TO-92-3 Short Body

Base Product Number:

KSA11

Manufacturer:

onsemi

Product Status:

Obsolete

Current - Collector (Ic) (Max):

500 mA

Vce Saturation (Max) @ Ib, Ic:

400mV @ 50mA, 500mA

DC Current Gain (hFE) (Min) @ Ic, Vce:

70 @ 100mA, 1V

Frequency - Transition:

-

Mounting Type:

Through Hole

Supplier Device Package:

TO-92S

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

REACH Status:

REACH Unaffected

HTSUS:

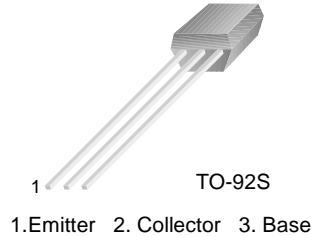
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SEMICONDUCTOR®

KSA1150

Low Frequency Power Amplifier

- Collector Dissipation : $P_C = 300\text{mW}$
- Complement to KSC2710



PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current (DC)	-500	mA
I_{CP}	* Collector Current (Pulse)	-700	mA
P_C	Collector Power Dissipation	300	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

* $PW \leq 350\text{ms}$, Duty cycle $\leq 50\%$

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

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = -100\mu\text{A}$, $I_E = 0$	-40			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}$, $I_B = 0$	-20			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -100\mu\text{A}$, $I_C = 0$	-5			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = -25\text{V}$, $I_E = 0$			-100	nA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = -3\text{V}$, $I_C = 0$			-100	nA
h_{FE}	* DC Current Gain	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	40		400	
$V_{CE}(\text{sat})$	* Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-0.3	-0.4	V
$V_{BE}(\text{sat})$	* Base-Emitter Saturation Voltage	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-1.0	-1.3	V

* Pulse Test: $PW \leq 350\mu\text{s}$, Duty cycle $\leq 2\%$

h_{FE} Classification

Classification	R	O	Y	G
h_{FE}	40 ~ 80	70 ~ 140	120 ~ 240	200 ~ 400

Typical Characteristics

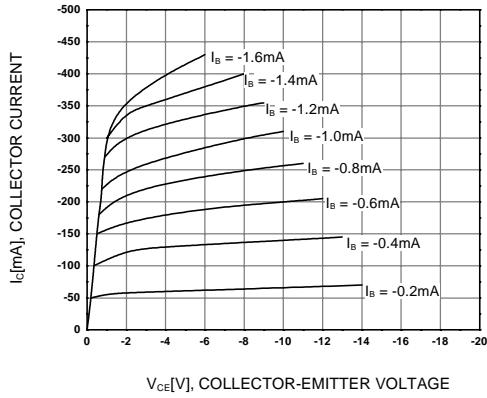


Figure 1. Static Characteristic

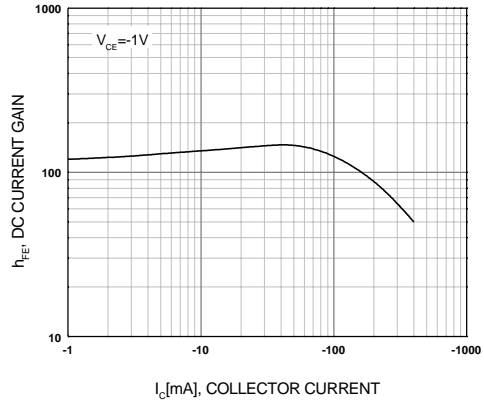


Figure 2. DC current Gain

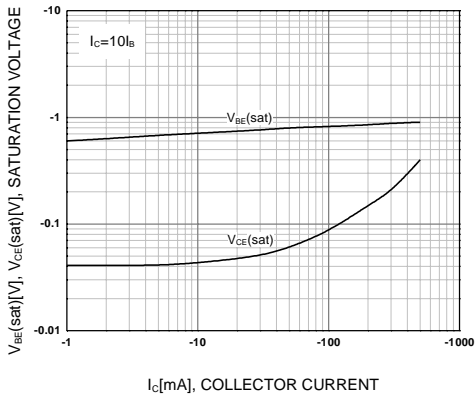


Figure 3. Base-Emitter Saturation Voltage
Collector-Emmitter Saturation Voltage

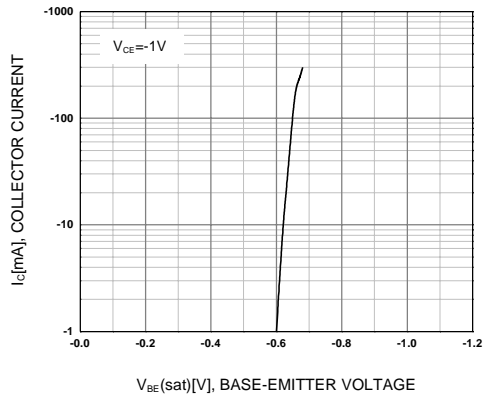


Figure 4. Base-Emitter On Voltage

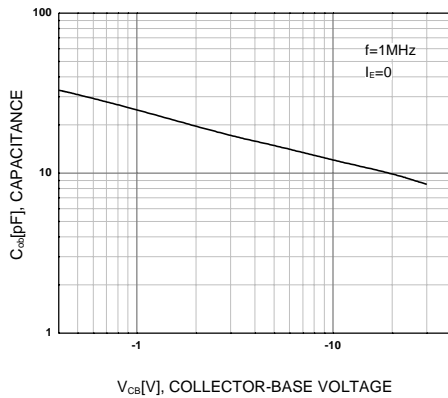
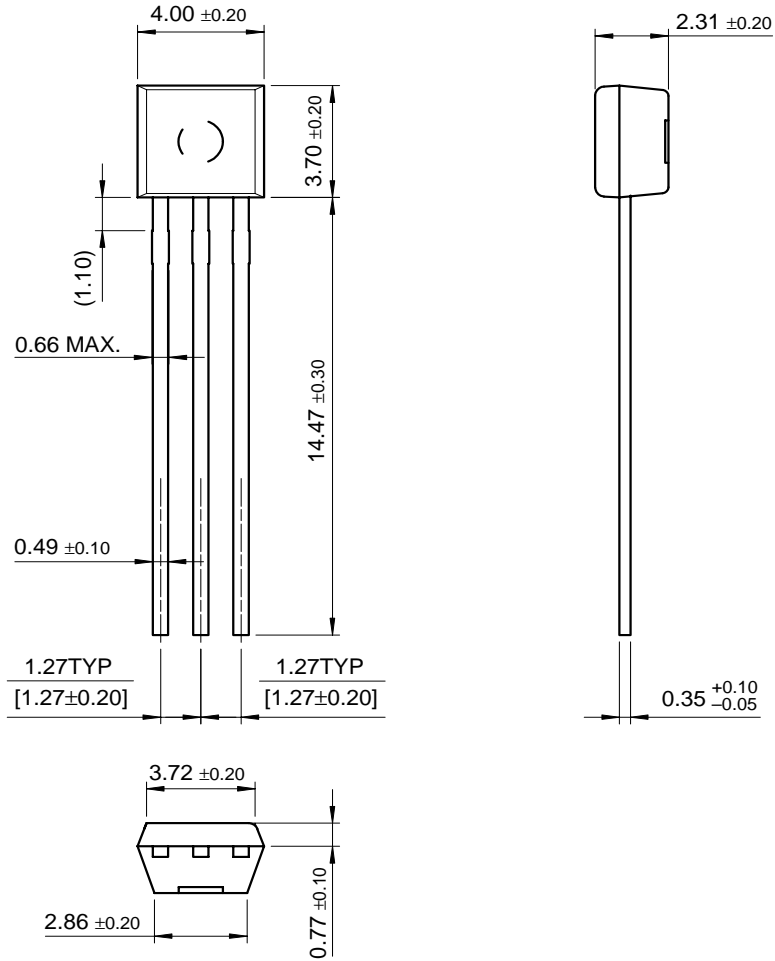


Figure 5. Collector Output Capacitance

Package Dimensions

TO-92S



Dimensions in Millimeters

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