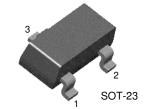


### **KSA1298**

# **Low Frequency Power Amplifier** • Complement to KSC3265



#### 1. Base 2. Emitter 3. Collector

# **PNP Epitaxial Silicon Transistor**

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

Symbol	Parameter	Ratings	Units
$V_{CBO}$	Collector-Base Voltage	-30	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-25	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current	-800	mA
I <sub>B</sub>	Base Current	-160	mA
P <sub>C</sub>	Collector Power Dissipation	200	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C

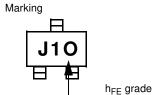
Refer to KSA643 for graphs.

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

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -10mA, I <sub>B</sub> =0	-25			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -1mA, I <sub>C</sub> =0	-5			V
I <sub>CBO</sub>	Collector Cut-off Current	V <sub>CB</sub> = -30V, I <sub>E</sub> =0			-100	nA
I <sub>EBO</sub>	Emitter Cut-off Current	V <sub>BE</sub> = -5V, I <sub>C</sub> =0			-100	nA
h <sub>FE1</sub>	DC Current Gain	V <sub>CE</sub> = -1V, I <sub>C</sub> = -100mA	100		320	
h <sub>FE2</sub>		$V_{CE} = -1V, I_{C} = -800 \text{mA}$	40			
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -500mA, I <sub>B</sub> = -20mA			-0.4	V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	V <sub>CE</sub> = -1V, I <sub>C</sub> = -10mA	-0.5		-0.8	V
f <sub>T</sub>	Current Gain Bandwidth Product	V <sub>CE</sub> = -5V, I <sub>C</sub> = -10mA		120		MHz
C <sub>ob</sub>	Output Capacitance	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f=1MHz		13		pF

## h<sub>FE1</sub> Classification

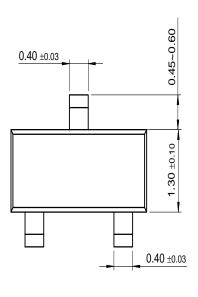
Classification	0	Y	
h <sub>FE1</sub>	100 ~ 200	160 ~ 320	

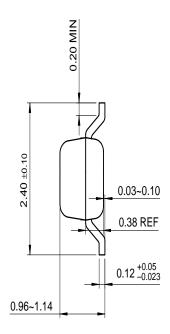


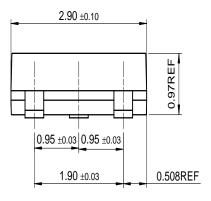
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# **Package Demensions**

# SOT-23







Dimensions in Millimeters

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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.
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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### **KSA1298**

PNP Epitaxial Silicon Transistor

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#### **Features**

#### **Low Frequency Power Amplifier**

Complement to KSC3265

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Product status/pricing/packaging

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How to order products

**Product Change Notices** (PCNs)

Support

Sales support

Quality and reliability

Design center

Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
KSA1298OMTF	Full Production	Full Production	\$0.035	<u>SOT-23</u>	3	TAPE REEL	<u>Line 1:</u> J1O
KSA1298YMTF	Full Production	Full Production	\$0.035	<u>SOT-23</u>	3	TAPE REEL	Line 1: J1Y
KSA1298YMTF_NL	Full Production	Full Production	N/A	<u>SOT-23</u>	3	TAPE REEL	Line 1: J1Y

<sup>\*</sup> Fairchild 1,000 piece Budgetary Pricing

<sup>\*\*</sup> A sample button will appear if the part is available through Fairchild's on-line samples program. If there is no sample button, please contact a Fairchild distributor to obtain samples



Indicates product with Pb-free second-level interconnect. For more information click here.

Package marking information for product KSA1298 is available. Click here for more information.

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#### **Qualification Support**

Click on a product for detailed qualification data

Product
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