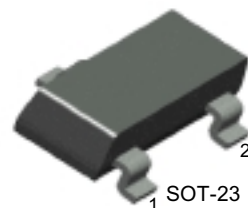


KSA1298

KSA1298

Low Frequency Power Amplifier

- Complement to KSC3265



SOT-23

1. Base 2. Emitter 3. Collector

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	-30	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-800	mA
I_B	Base Current	-160	mA
P_C	Collector Dissipation	200	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

• Refer to KSA643 for graphs.

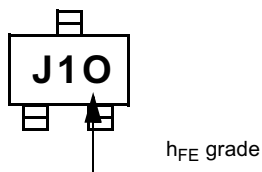
Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}$, $I_B = 0$	-25			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -1\text{mA}$, $I_C = 0$	-5			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = -30\text{V}$, $I_E = 0$			-100	nA
I_{EBO}	Emitter Cut-off Current	$V_{BE} = -5\text{V}$, $I_C = 0$			-100	nA
h_{FE1} h_{FE2}	DC Current Gain	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$ $V_{CE} = -1\text{V}$, $I_C = -800\text{mA}$	100 40		320	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}$, $I_B = -20\text{mA}$			-0.4	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE} = -1\text{V}$, $I_C = -10\text{mA}$	-0.5		-0.8	V
f_T	Current Gain Bandwidth Product	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$		120		MHz
C_{ob}	Output Capacitance	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		13		pF

h_{FE1} Classification

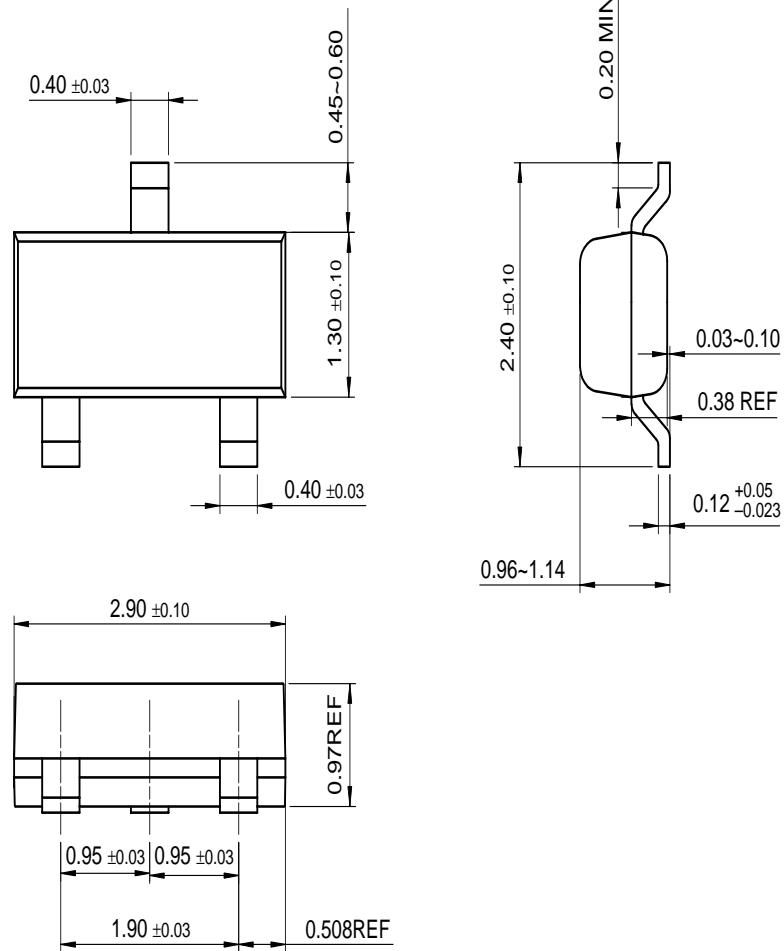
Classification	O	Y
h_{FE1}	100 ~ 200	160 ~ 320

Marking



Package Dimensions

SOT-23



Dimensions in Millimeters

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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