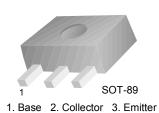
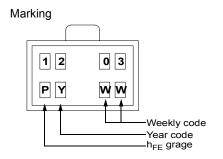


KSA1203 PNP Epitaxial Silicon Transistor

Low Frequency Power Amplifier

- · 3W Output application
- Collector Power Dissipation $P_C=1\sim2W$: Mounted on Ceramic Board
- Complement to KSC2883





Absolute Maximum Ratings T_a = 25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V _{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-1.5	Α
I _B	Base Current	-0.3	Α
P _C P _C *	Collector Power Dissipation	500 1,000	mW mW
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 ~ 150	°C

^{*} Mounted on Ceramic Board (250mm $^2 \times 0.8$ mm)

Electrical Characteristics T_a = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA, I _B = 0	-30			V
BV _{EBO}	Emitter-Base Breakdown Voltage	$I_E = -1 \text{mA}, I_C = 0$	-5			V
I _{CBO}	Collector Cut-off Current	$V_{CB} = -30V, I_{E} = 0$			-100	nA
I _{EBO}	Emitter Cut-off Current	$V_{BE} = -5V, I_{C} = 0$			-100	nA
h _{FE}	DC Current Gain	$V_{CE} = -2V, I_{C} = -500 \text{mA}$	100		320	
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C = -1.5A, I _B = -30mA			-2.0	V
V _{BE} (on)	Base-Emitter On Voltage	$V_{CE} = -2V, I_{C} = -500 \text{mA}$			-1.0	V
f _T	Current Gain Bandwidth Product	$V_{CE} = -2V, I_{C} = -500 \text{mA}$		120		MHz
C _{ob}	Output Capacitance	$V_{CB} = -10V$, $I_{E} = 0$, $f = 1MHz$			50	pF

h_{FE} Classification

Classification	0	Y	
h _{FE}	100 ~ 200	160 ~ 320	

Package Marking and Ordering Information

Device Marking	Device	Package	Reel Size	Tape Width	Quantity
1203	KSA1203	SOT-89	13"		4,000

Typical Performance Characteristics

Figure 1. Static Characteristic

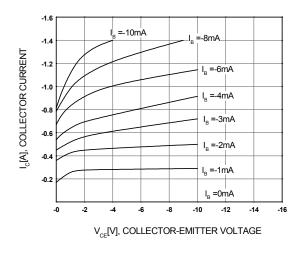


Figure 2. DC Current Gain

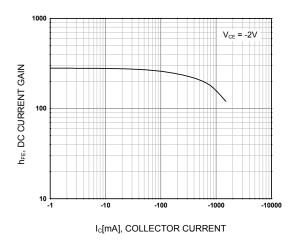


Figure 3. Collector-Emitter Saturation Voltage

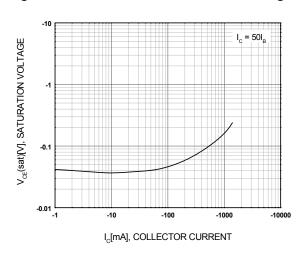


Figure 4. Base-Emitter On Voltage

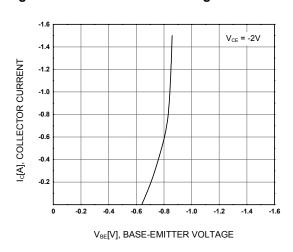


Figure 5. Safe Operating Area

KSA1203 Rev. B3

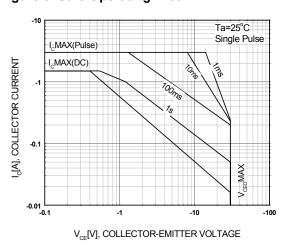
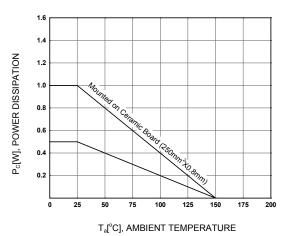


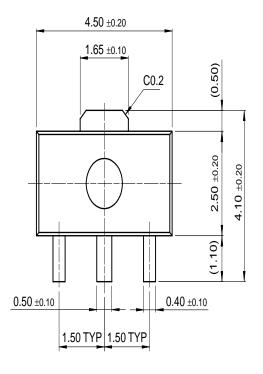
Figure 6. Power Derating

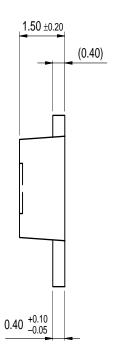


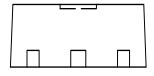
3 www.fairchildsemi.com

Mechanical Dimensions

SOT-89







Dimensions in Millimeters

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SuperSOT™-6

PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
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Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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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