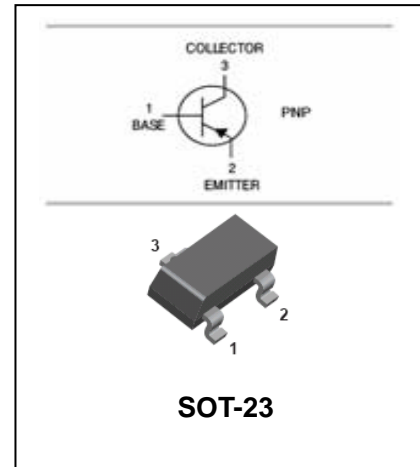


Silicon Epitaxial Planar Transistor

KTA1298

FEATURES

- High DC current gain: $h_{FE}=100-320$.
- Low saturation voltage: $V_{CE(sat)}=-0.4V(\text{Max})$
($I_C=-500\text{mA}, I_B=-20\text{mA}$).
- Suitable for driver stage of small motor.
- Complementary to KTC3265.
- Small package.



APPLICATIONS

- Low frequency power amplifier application.
- Power switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
KTA1298	IO/IY	SOT-23

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-800	mA
P_C	Collector Dissipation	200	mW
T_j, T_{stg}	Junction and Storage Temperature	-55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Silicon Epitaxial Planar Transistor

KTA1298

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1\text{mA}, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30\text{V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$ $V_{CE} = -1\text{V}, I_C = -800\text{mA}$	100 40		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -20\text{mA}$			-0.4	V
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		13		pF

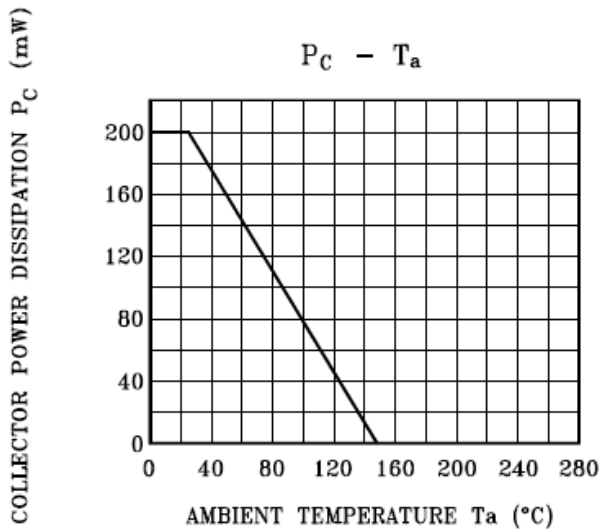
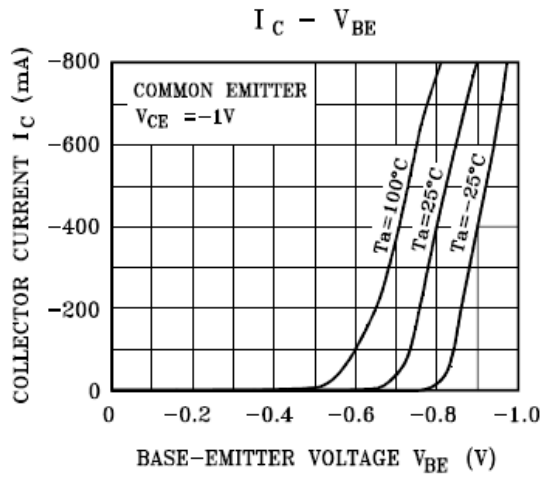
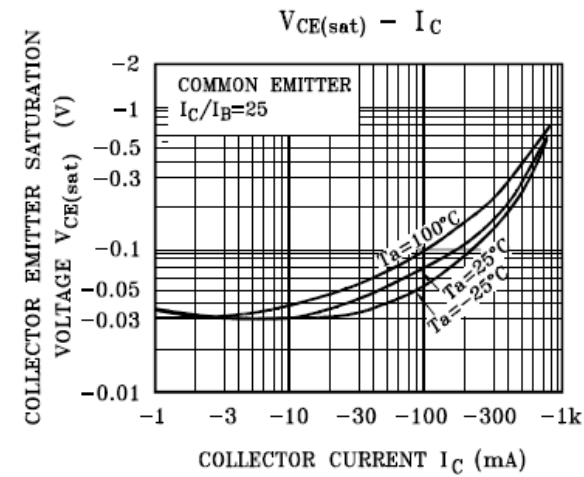
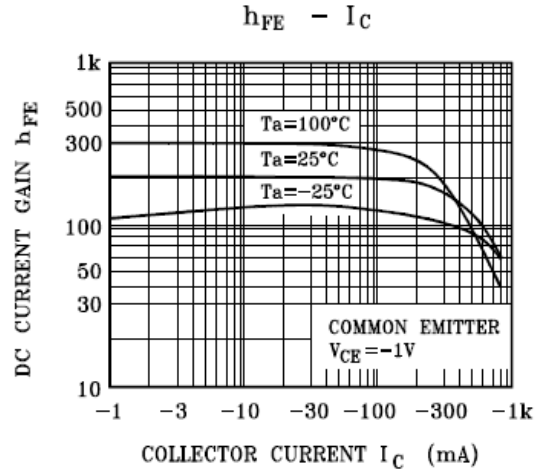
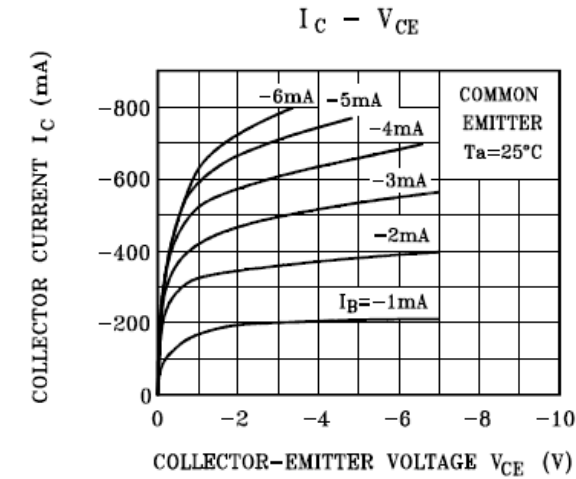
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320

Silicon Epitaxial Planar Transistor

KTA1298

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



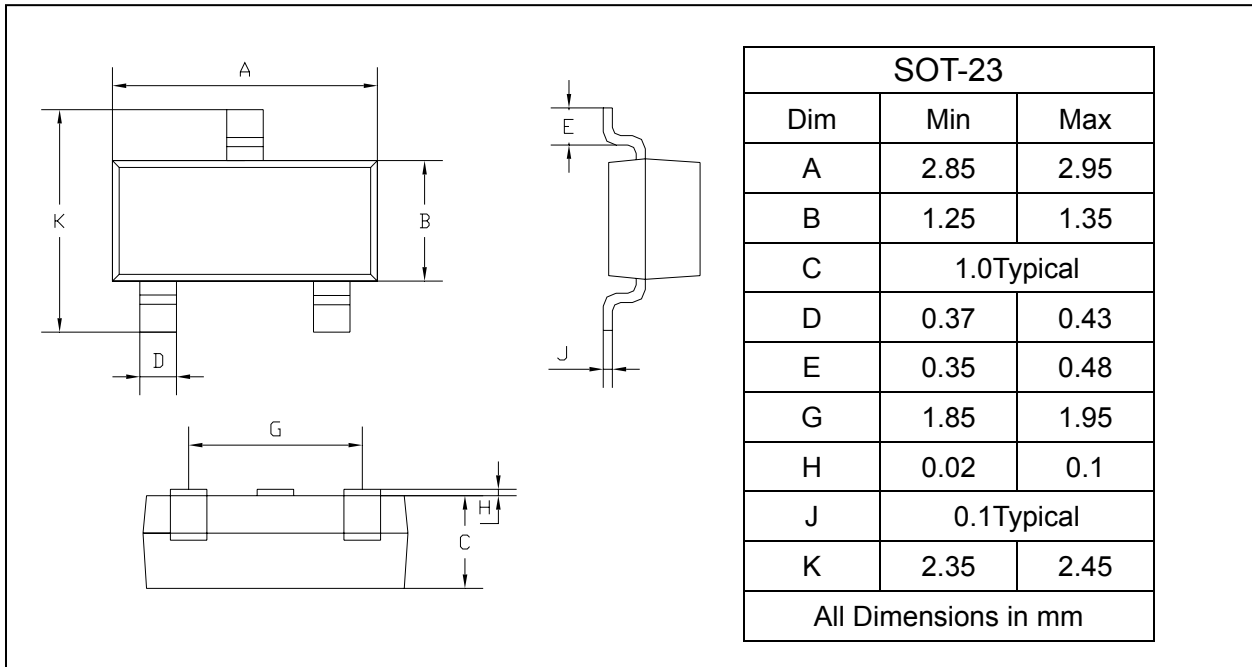
Silicon Epitaxial Planar Transistor

KTA1298

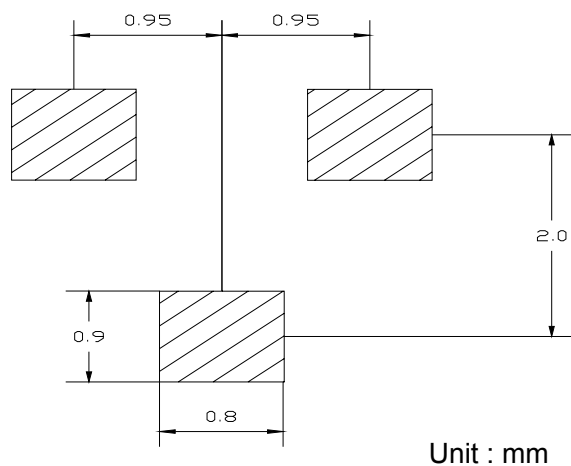
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
KTA1298	SOT-23	3000/Tape&Reel