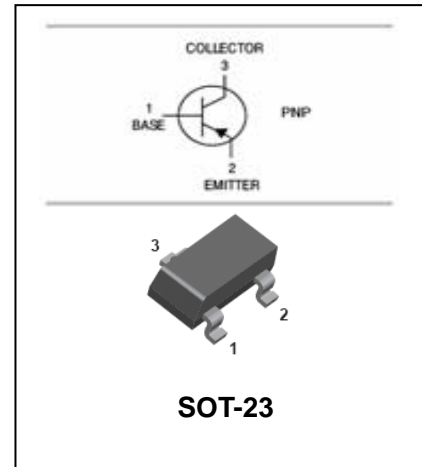


Silicon Epitaxial Planar Transistor

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 to +150	$^\circ\text{C}$



Silicon Epitaxial Planar Transistor

KTA1298

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-1mA, I_E=0$	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10mA, I_B=0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-1mA, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-30V, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1V, I_C=-100mA$	100		320	
	$h_{FE(2)}$	$V_{CE}=-1V, I_C=-800mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500mA, I_B=-20mA$			-0.4	V
Base-emitter voltage	V_{BE}	$V_{CE}=-1V, I_C=-10mA$	-0.5		-0.8	V
Transition frequency	f_T	$V_{CE}=-5V, I_C=-10mA$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$		13		pF

CLASSIFICATION OF $h_{FE(1)}$

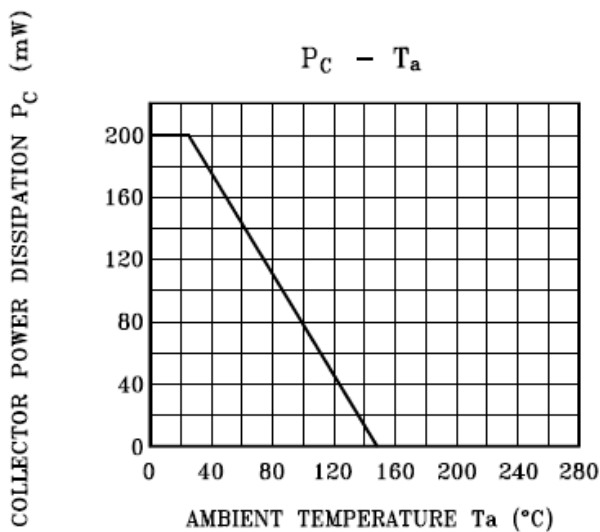
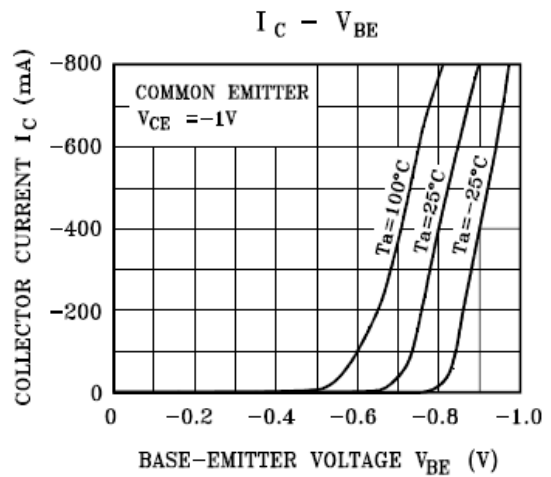
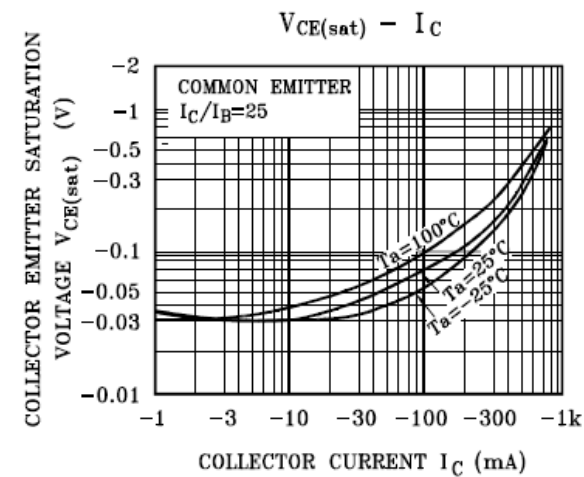
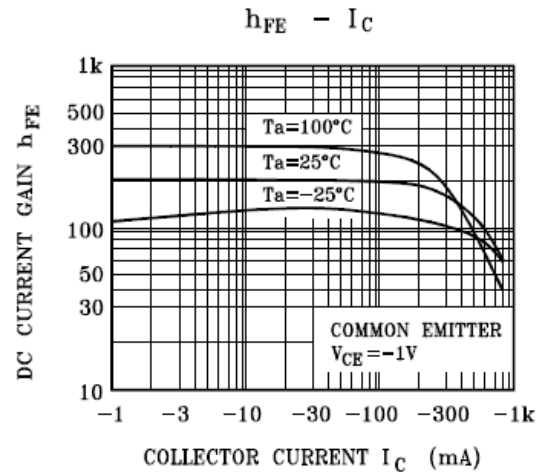
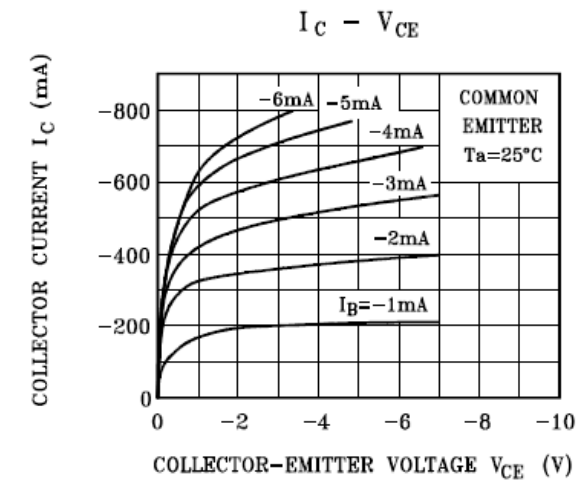
Rank	O	Y
Range	100-200	160-320



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