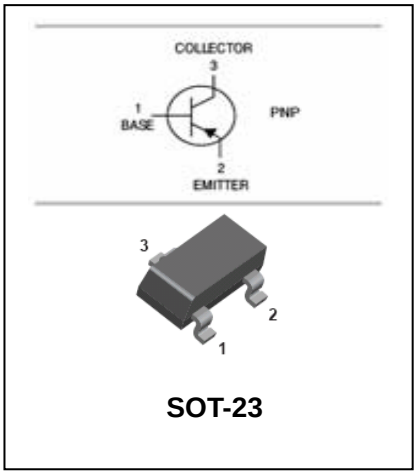
Silicon Epitaxial Planar Transistor **KTA1298**

FEATURES

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

Lead-free



SOT-23

APPLICATIONS

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

ORDERING INFORMATION

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

MAXIMUM RATING @ Ta=25℃ 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	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ 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=-1mA,I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-32			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}	V_{CE}=-1V,I_C=-100mA V_{CE}=-1V,I_C=-800mA	100 40		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA, I_B=-20mA			-0.4	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

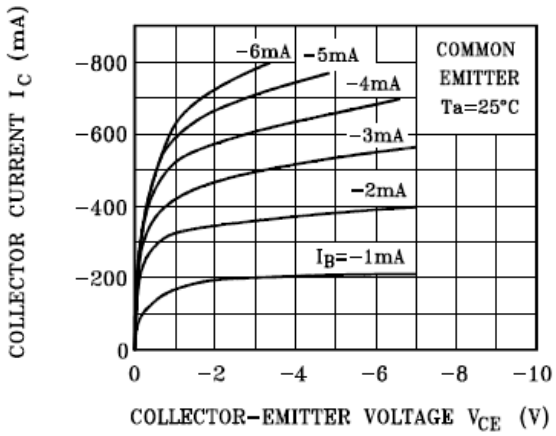
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320

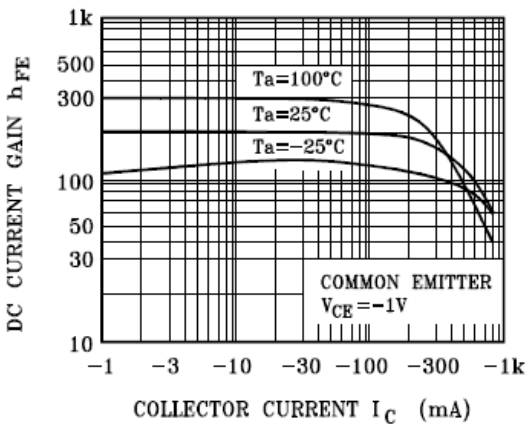
Silicon Epitaxial Planar Transistor **KTA1298**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

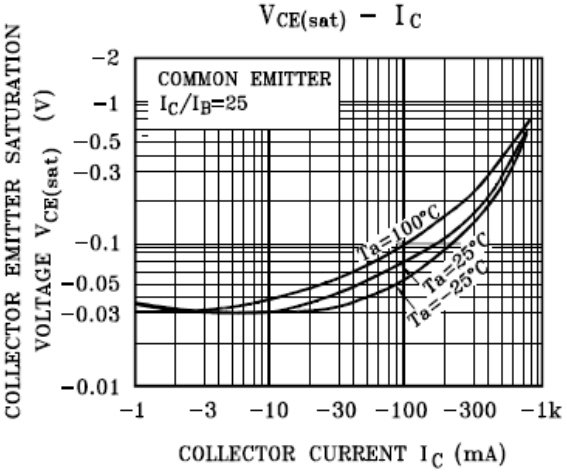
$I_C - V_{CE}$



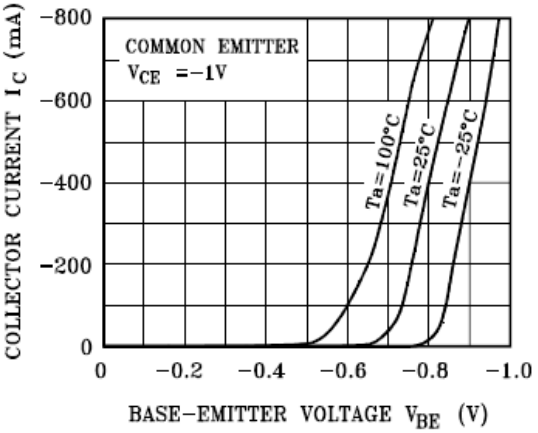
$h_{FE} - I_C$



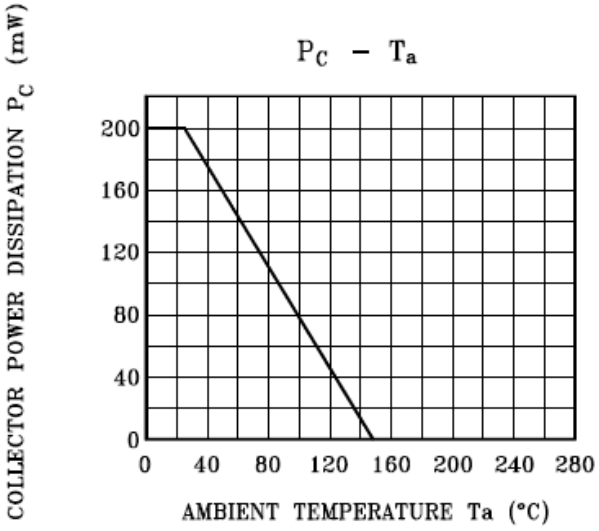
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



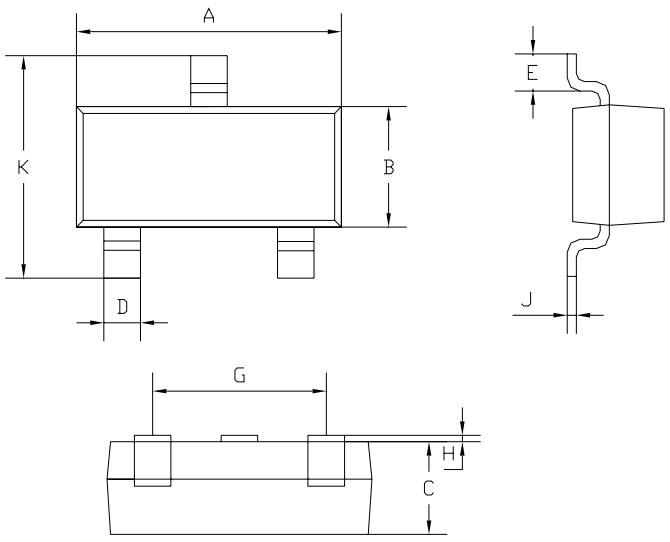
$P_C - T_a$



Silicon Epitaxial Planar Transistor **KTA1298**

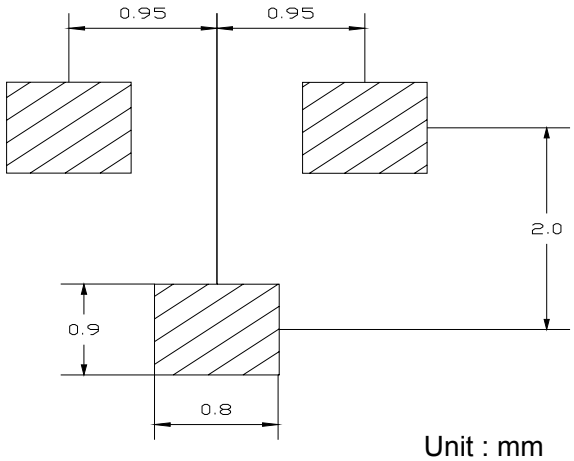
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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