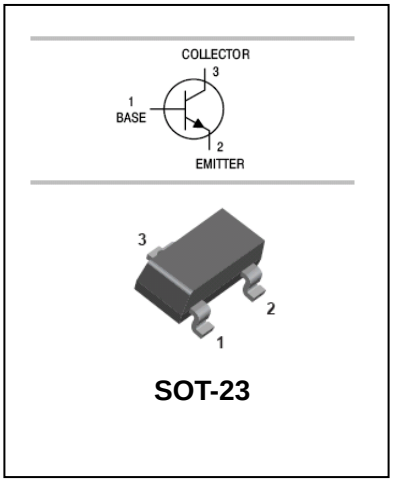
NPN Silicon Epitaxial Planar Transistor **KTC3265**

FEATURES

Lead-free

- High DC current gain: h_{FE}:100-320
- Low saturation voltage.
- Suitable for driver stage of small motor.
- Complementary to KTC1298.
- Small package.



SOT-23

APPLICATIONS

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

ORDERING INFORMATION

Type No.	Marking	Package Code
KTC3265	EO/EY	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
I_B	Base Current	160	mA
P_C	Collector Power Dissipation	200	mW
T_j,T_{stg}	Junction and Storage Temperature	-55~150	℃

NPN Silicon Epitaxial Planar Transistor **KTC3265**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10mA,I_E=0	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10mA,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	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA, I_B=20mA			0.5	V
Transition frequency	f_T	V_{CE}=5V, I_C= 10mA f=100MHz		120		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz		13		pF

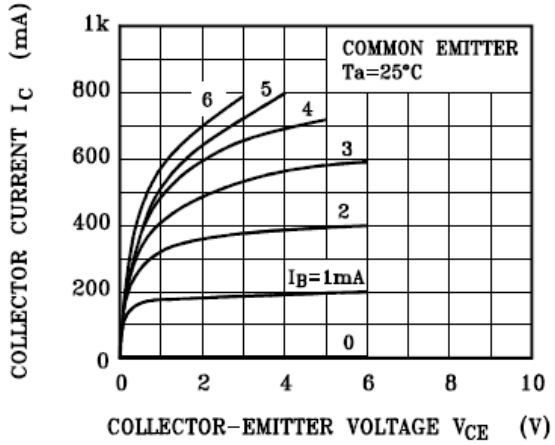
CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	100-200	160-320
Marking	EO	EY

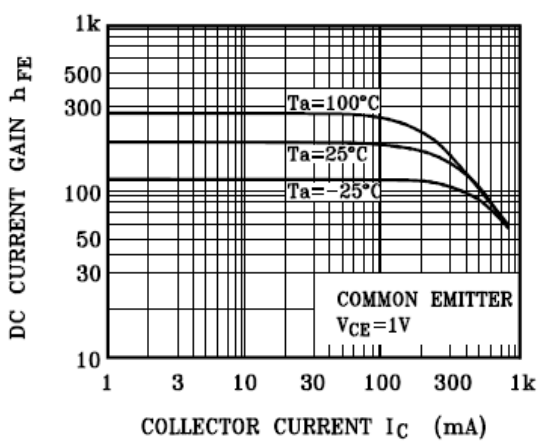
NPN Silicon Epitaxial Planar Transistor **KTC3265**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

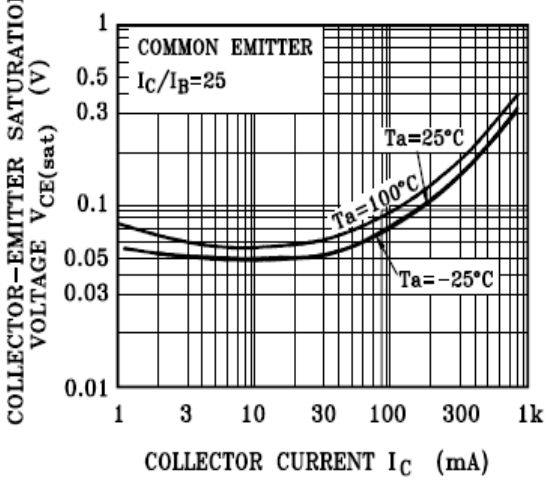
$I_C - V_{CE}$



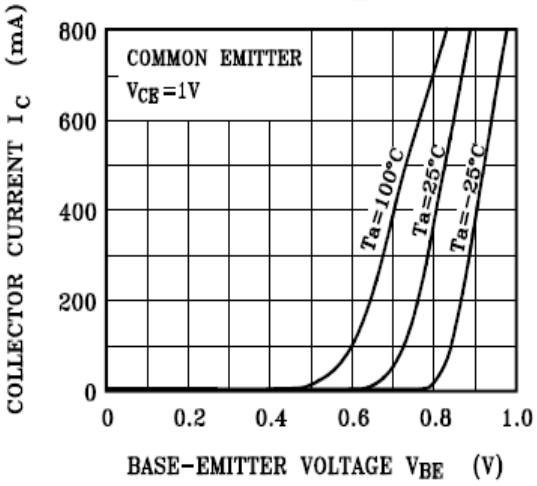
$h_{FE} - I_C$



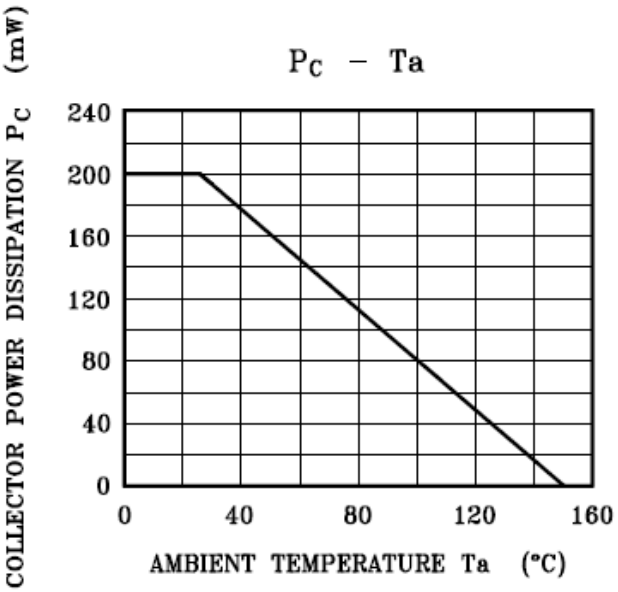
$V_{CE(sat)} - I_C$



$I_C - V_{BE}$



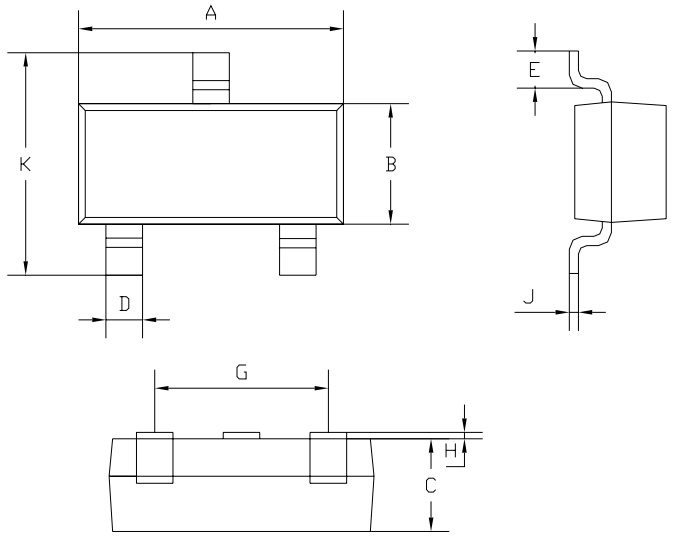
$P_C - Ta$



NPN Silicon Epitaxial Planar Transistor **KTC3265**

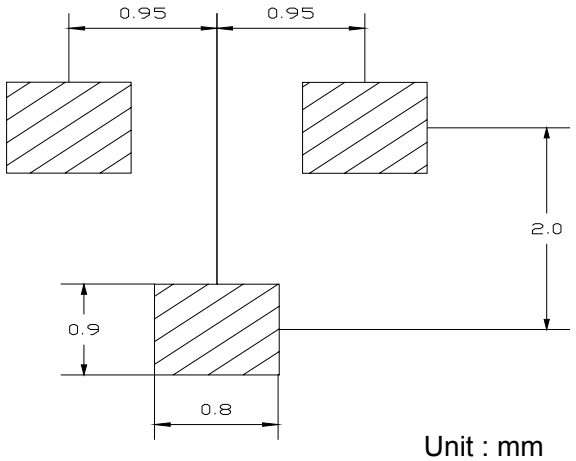
PACKAGE OUTLINE

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
KTC3265	SOT-23	3000/Tape&Reel