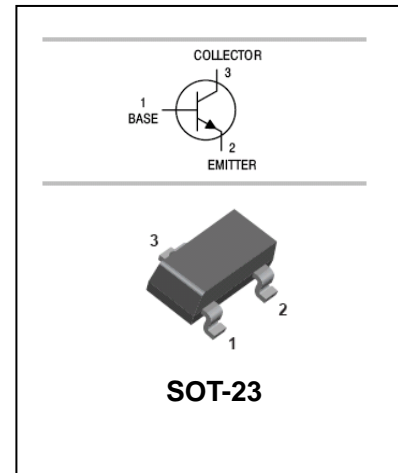


NPN Silicon Epitaxial Planar Transistor

KTC3265

FEATURES

- High DC current gain: h_{FE} :100-320.
- Low saturation voltage.
- Suitable for driver stage of small motor.
- Complementary to KTA1298.
- Small package.



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°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
I_B	Base Current	160	mA
P_C	Collector Power Dissipation	200	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	°C



NPN Silicon Epitaxial Planar Transistor

KTC3265

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}	$V_{CE}=1V, I_C=100mA$ $V_{CE}=1V, I_C=800mA$	100 40		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=20mA$			0.5	V
Base-emitter saturation voltage	V_{BE}	$V_{CE}=1V, I_C=10mA$	0.5		0.8	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}

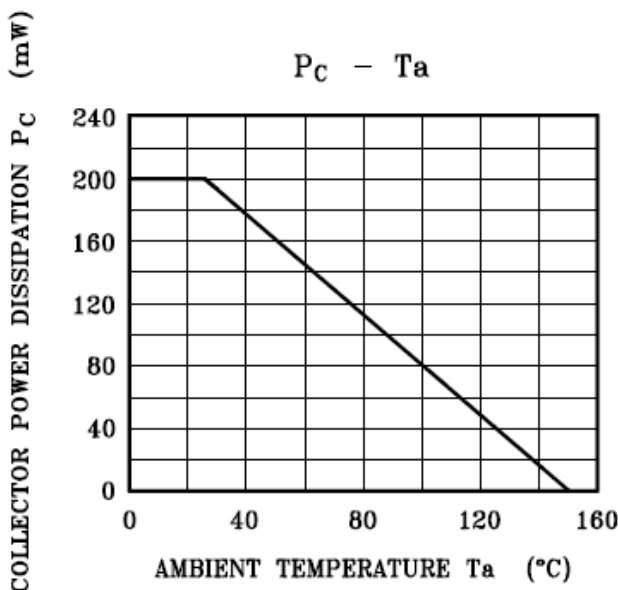
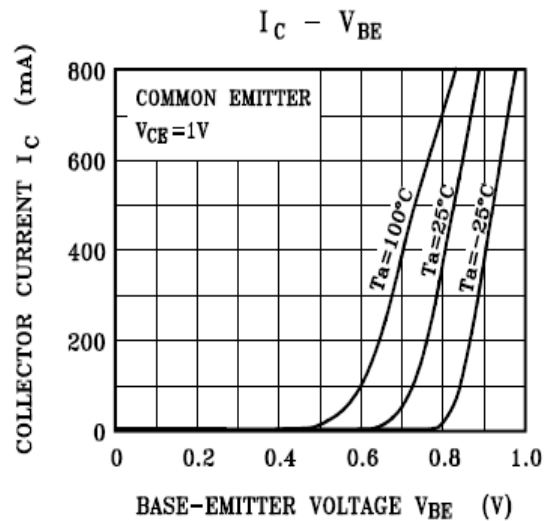
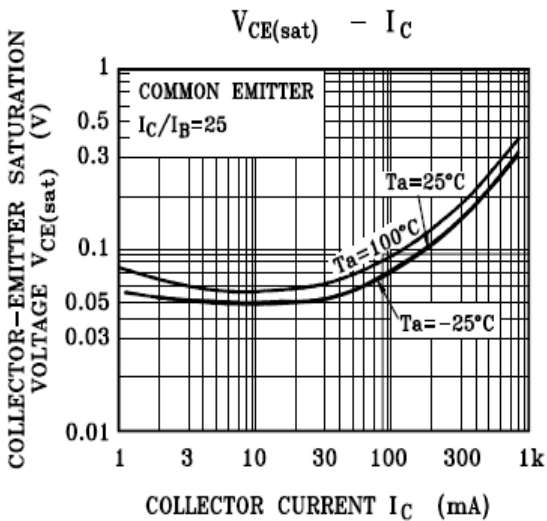
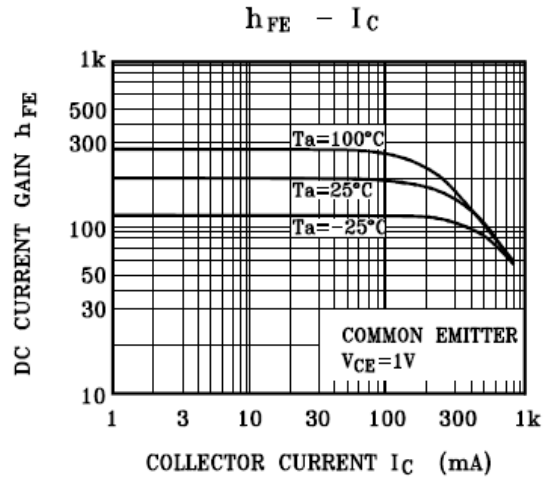
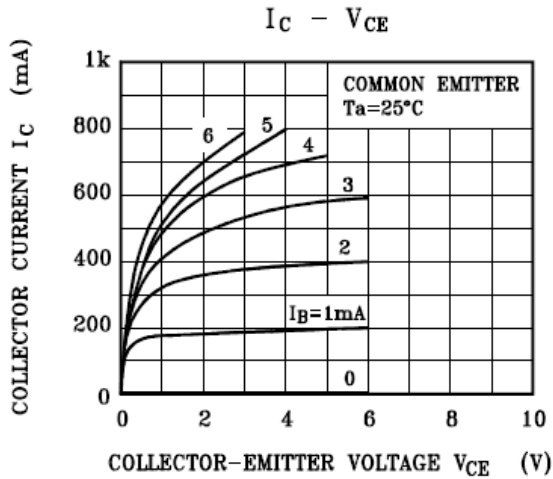
Rank	O	Y
Range	100-200	160-320
Marking	EO	EY



NPN Silicon Epitaxial Planar Transistor

KTC3265

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





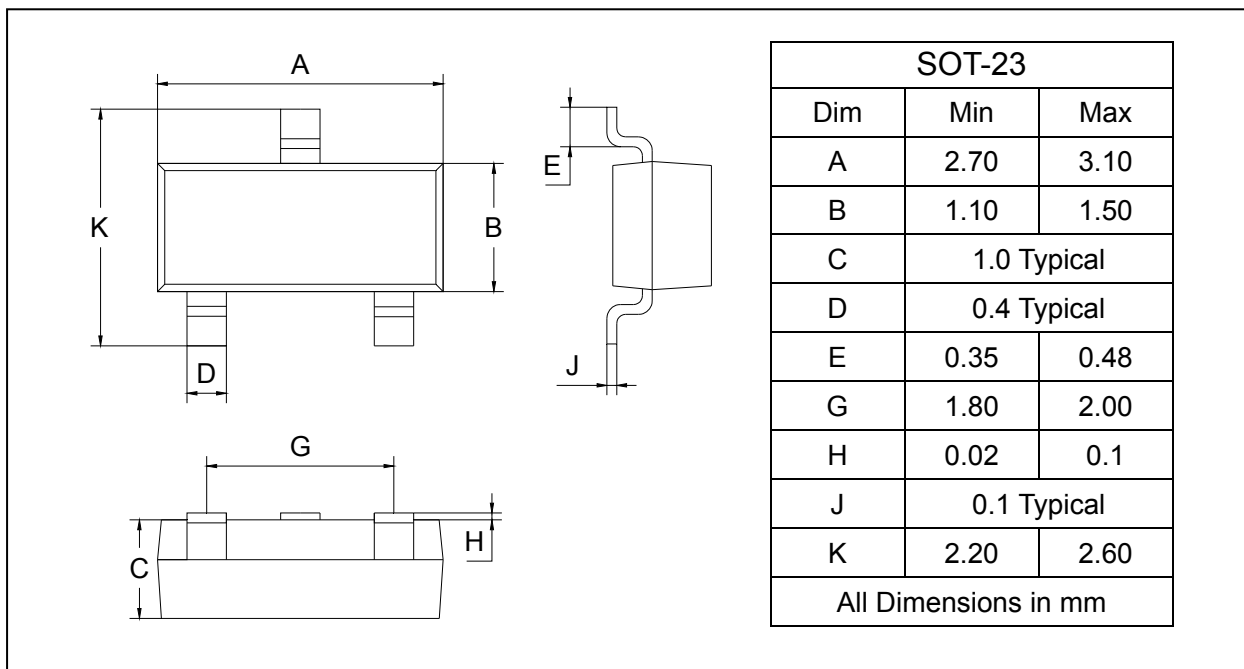
NPN Silicon Epitaxial Planar Transistor

KTC3265

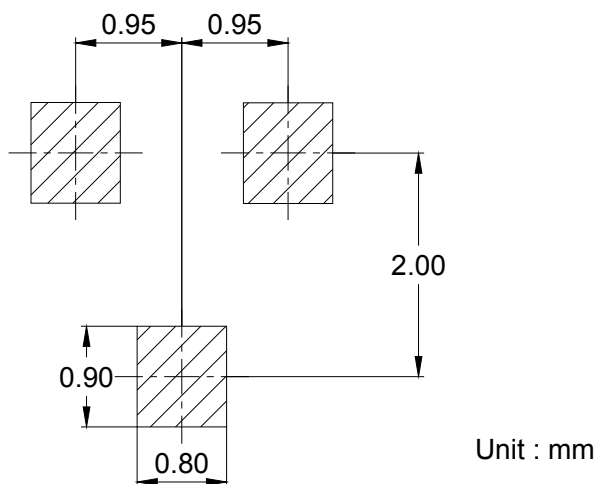
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
KTC3265	SOT-23	3000/Tape&Reel