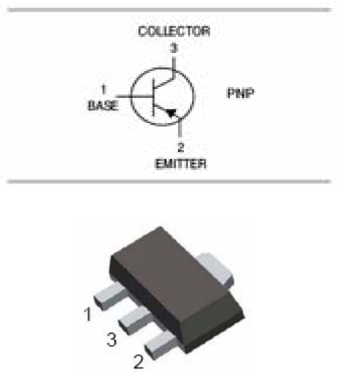
DONGGUAN NANJING ELECTRONICS LTD.,

PNP Silicon Epitaxial Planar Transistor

KTA1666

FEATURES

- High speed switching time.
- Low saturation voltage:$V_{CE(sat)}$=-0.5V(Max)
- P_C=1~2W(Mounted on ceramic substrate)
- Small flat package.
- Complementary: KTC4379.



SOT-89

APPLICATIONS

- Power amplifier application.
- Power switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
KTA1666	WO/WY	SOT-89

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-2	A
I_B	Base Current	-0.4	A
P_C	Collector Dissipation	500	mW
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55 to +150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

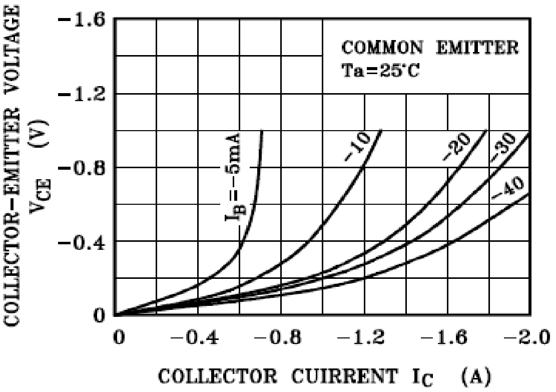
Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-1mA,I_E=0	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-50V,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}=-2V,I_C=-500mA	70		240	
		V_{CE}=-2V,I_C=-1.5A	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-1A, I_B= -50mA			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-1A, I_B= -50mA			-1.2	V
Transition frequency	f_T	V_{CE}=-2V, I_C= -0.5A		120		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz		40		pF

CLASSIFICATION OF $h_{FE(1)}$

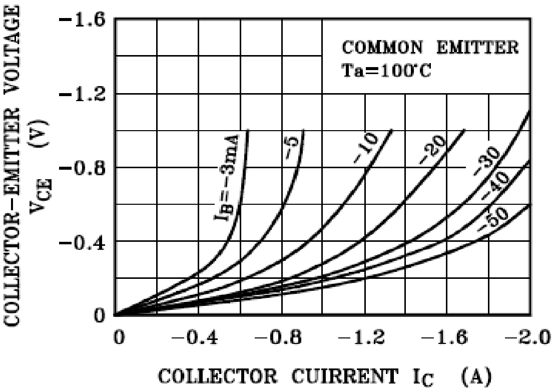
Rank	O	Y
Range	70-140	120-240
MARKING	WO	WY

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

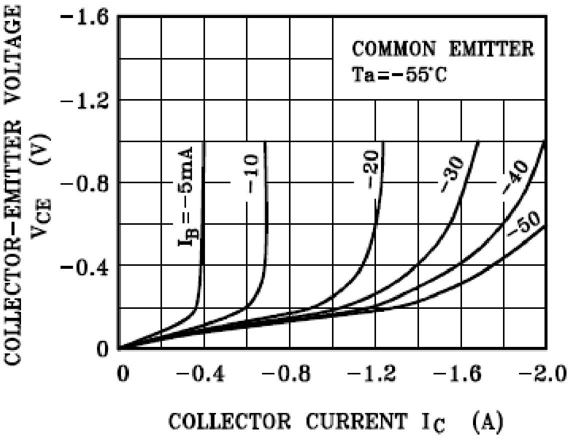
$V_{CE} - I_C$



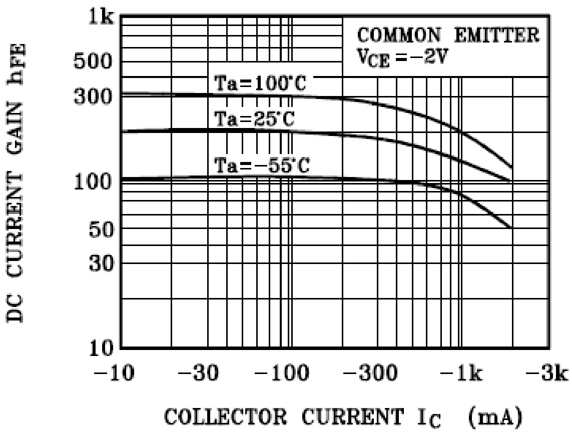
$V_{CE} - I_C$



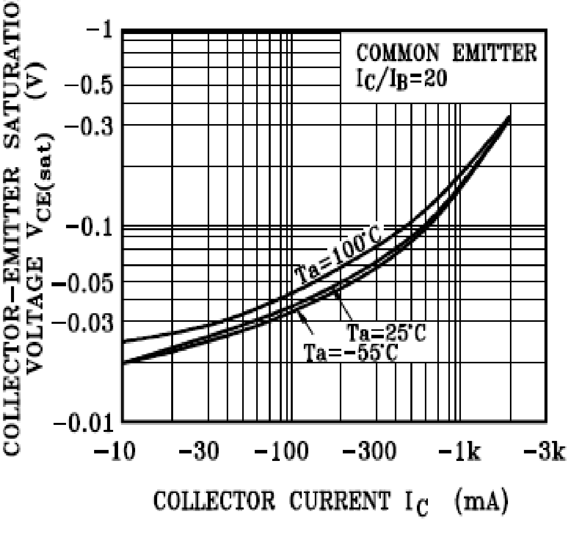
$V_{CE} - I_C$



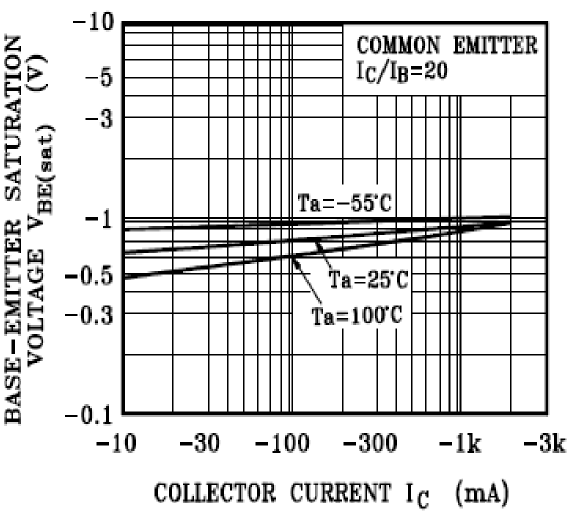
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$

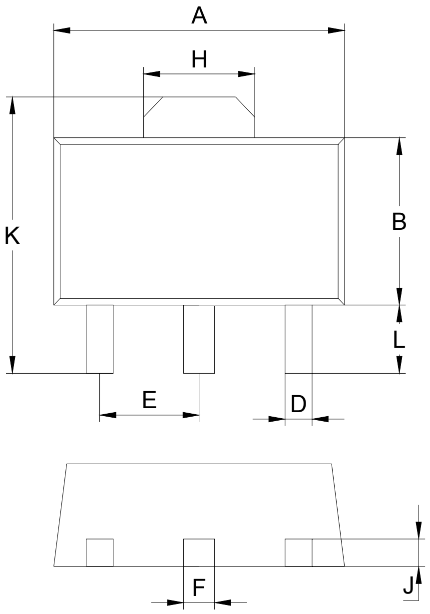


$V_{BE(sat)} - I_C$



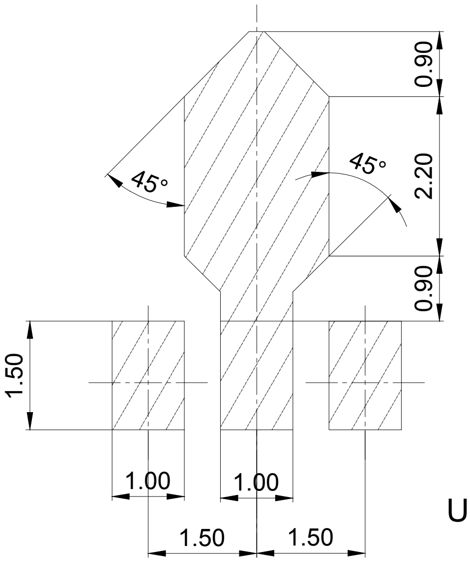
PACKAGE OUTLINE

Plastic surface mounted package SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.50 Typical	
D	0.40 Typical	
E	1.40	1.60
F	0.48 Typical	
H	1.60	1.80
J	0.40 Typical	
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit:mm

PACKAGE INFORMATION

Device	Package	Shipping
KTA1666	SOT-89	1000/Tape&Reel