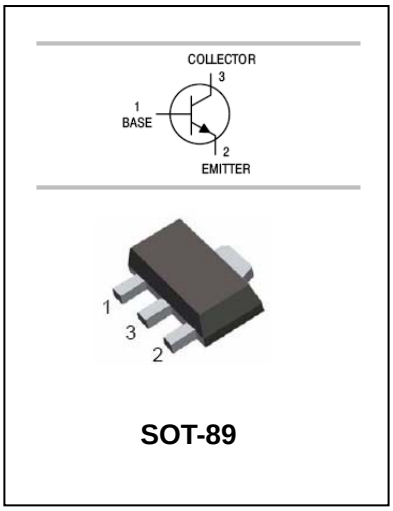
NPN Silicon Epitaxial Planar Transistor **KTC4373**

FEATURES

Lead-free

- High transition frequency:V_{CEO}=120V.
- High voltage:$V_{CE(sat)}$=0.5V(Max).
- P_C=1W(Mounted on ceramic substrate).
- Small flat package.
- Complementary: KTA1661.



SOT-89

APPLICATIONS

- Power amplifier application.
- Power switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
KTC4373	CO/CY	SOT-89

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	800	mA
I_B	Base current	160	mA
P_C	Collector Dissipation	500	mW
T_j, T_{stg}	Junction and Storage Temperature	-55~150	℃

NPN Silicon Epitaxial Planar Transistor **KTC4373**

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	120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=1mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=120V,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}=5V,I_C=100mA	80		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA, I_B= 50mA			1.0	V
Base-emitter voltage	V_{BE}	V_{CE}=5V, I_B= 500mA			1.0	V
Transition frequency	f_T	V_{CE}=5V, I_C= 0.1A		120		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz			30	pF

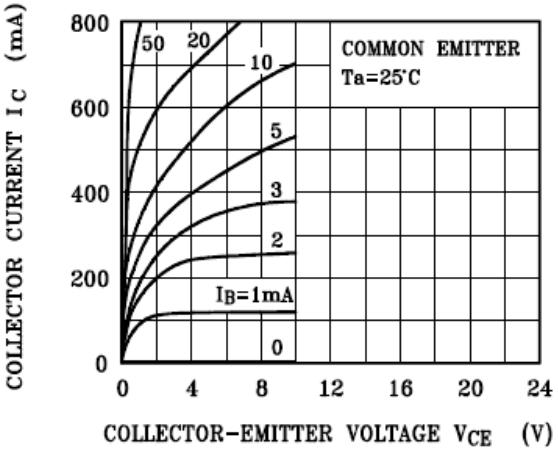
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	80-160	120-240
MARKING	CO	CY

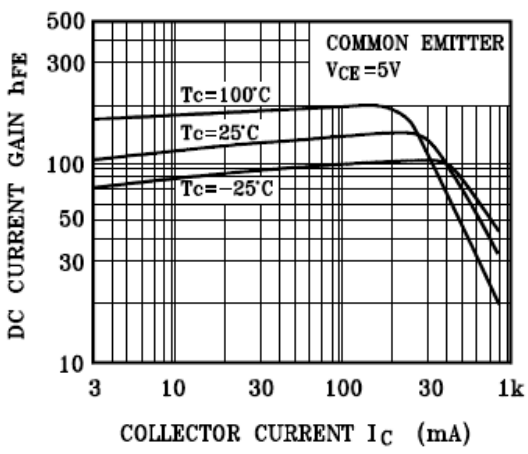
NPN Silicon Epitaxial Planar Transistor **KTC4373**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

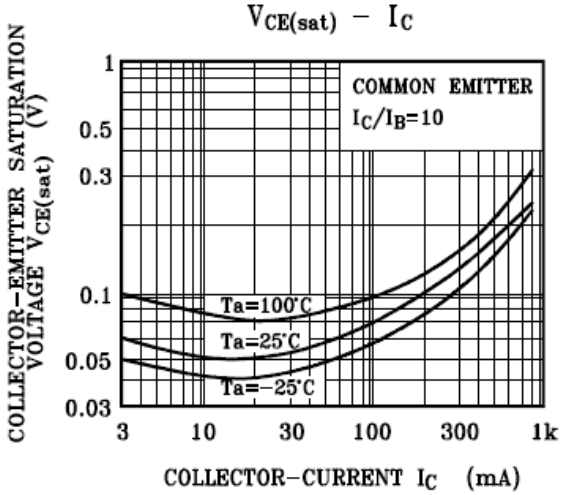
I_C – V_{CE}



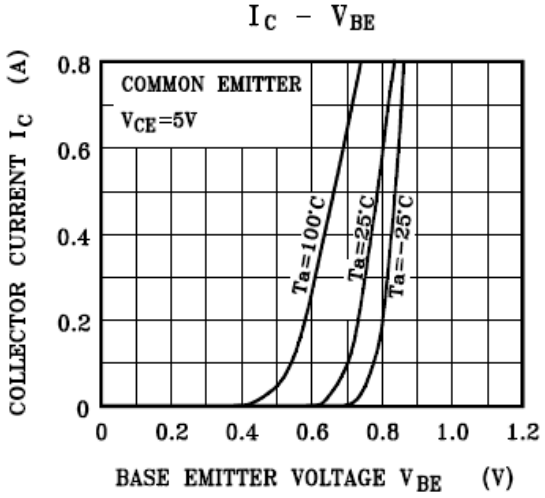
h_{FE} – I_C



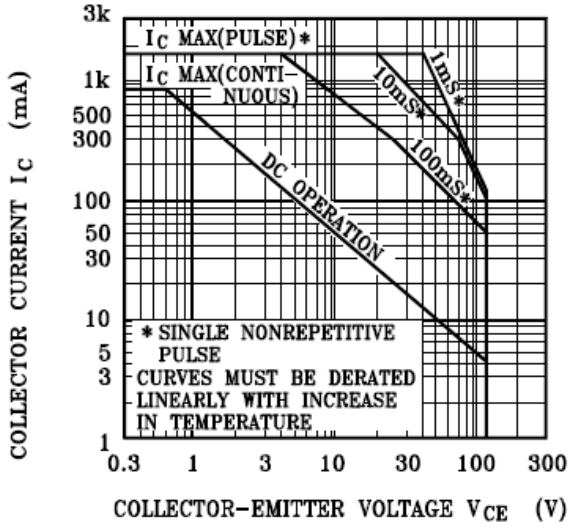
$V_{CE(sat)}$ – I_C



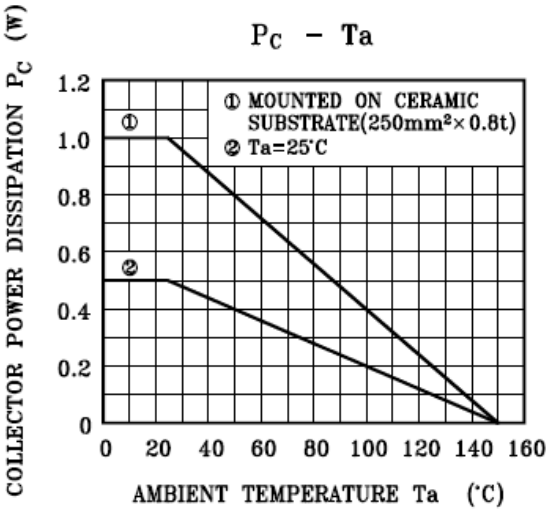
I_C – V_{BE}



SAFE OPERATING AREA



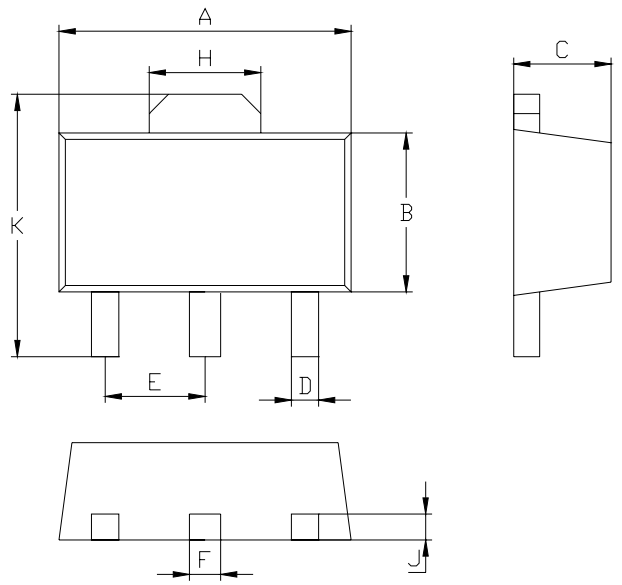
P_C – Ta



NPN Silicon Epitaxial Planar Transistor **KTC4373**

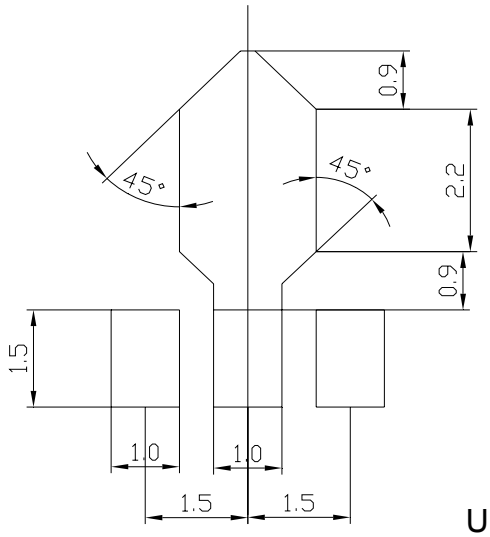
PACKAGE OUTLINE

Plastic surface mounted package SOT-89



SOT-89		
Dim	Min	Max
A	4.5	4.7
B	2.3	2.7
C	1.5Typical	
D	0.35	0.55
E	1.4	1.6
F	0.4	0.6
H	1.55	1.75
J	0.4Typical	
K	4.15	4.25
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit:mm

PACKAGE INFORMATION

Device	Package	Shipping
KTC4373	SOT-89	1000/Tape&Reel