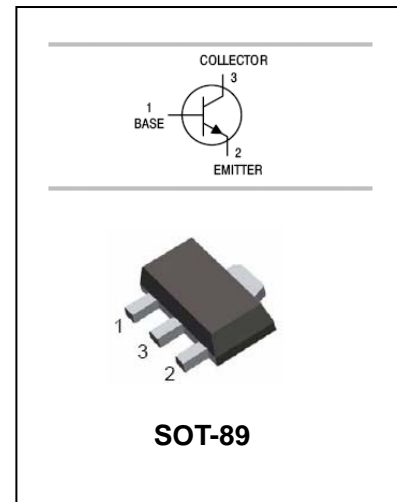


## Triple Diffused NPN Transistor

## KTC4372

### FEATURES

- High transition frequency:  $f_T=120\text{MHz(Typ.)}$ .
- High voltage:  $V_{CE0}=150\text{V}$ .
- $P_C=1\text{W}$ (Mounted on ceramic substrate).
- Small flat package.
- Complementary: KTA1660.



### APPLICATIONS

- High voltage switching application.

### ORDERING INFORMATION

Type No.	Marking	Package Code
KTC4372	AO/AY	SOT-89

### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	200	V
$V_{CEO}$	Collector-Emitter Voltage	150	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current	50	mA
$I_B$	Base current	10	mA
$P_C$	Collector Dissipation	500	mW
		1*	W
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	$^\circ\text{C}$

\*: KTC4372 mounted on ceramic substrate (250mm<sup>2</sup>x0.8t)



# Triple Diffused NPN Transistor

# KTC4372

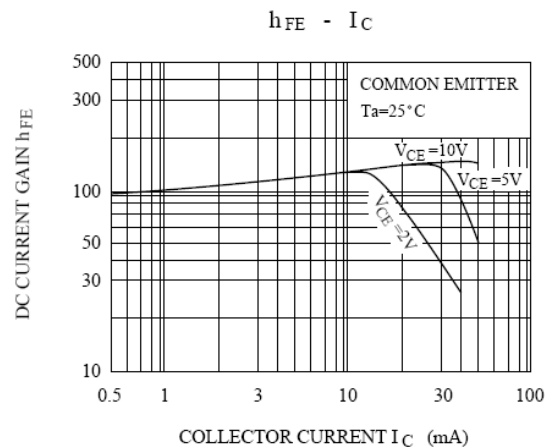
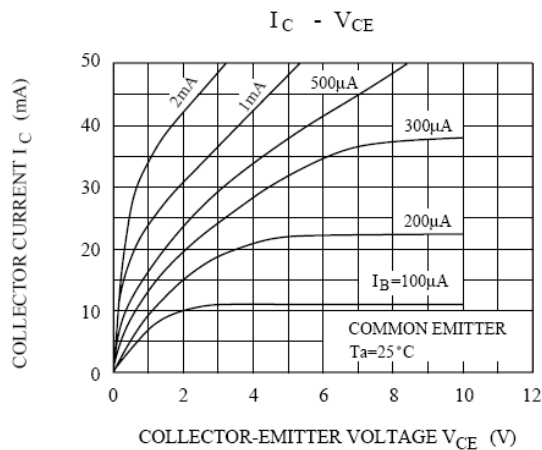
## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector cut-off current	$I_{CBO}$	$V_{CB}=200V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=5V, I_C=10mA$	70		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.5	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=5V, I_B=30mA$			1.0	V
Transition frequency	$f_T$	$V_{CE}=30V, I_C=10mA$		120		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$		3.5	5.0	pF

## CLASSIFICATION OF $h_{FE}$

Rank	O	Y
Range	70-140	120-240
MARKING	AO	AY

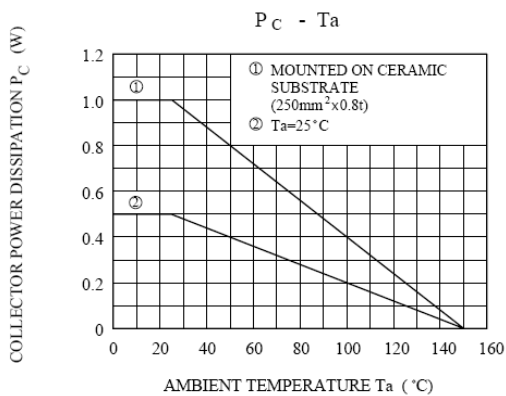
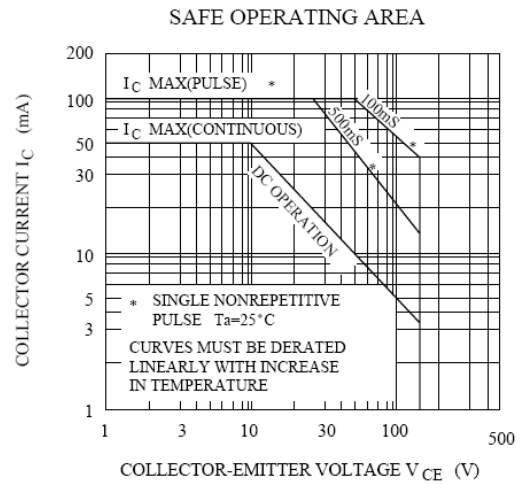
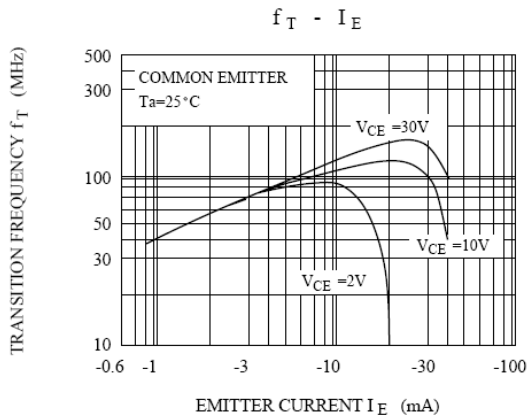
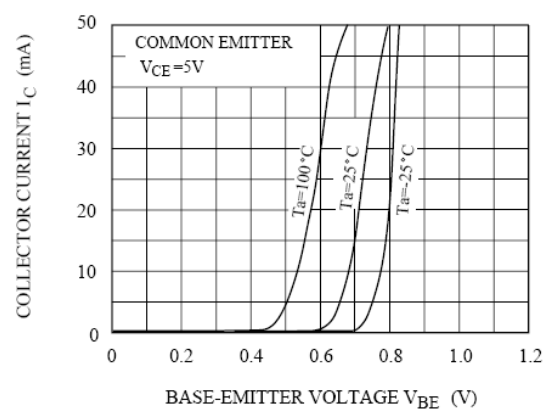
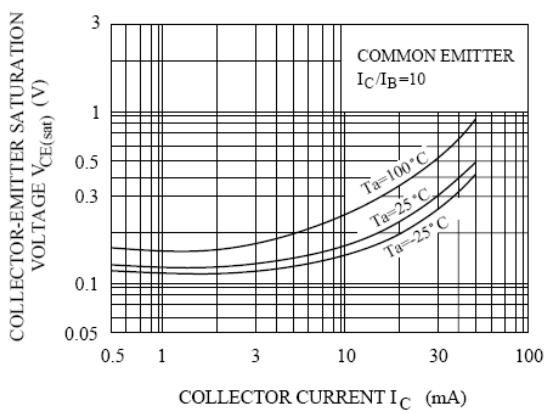
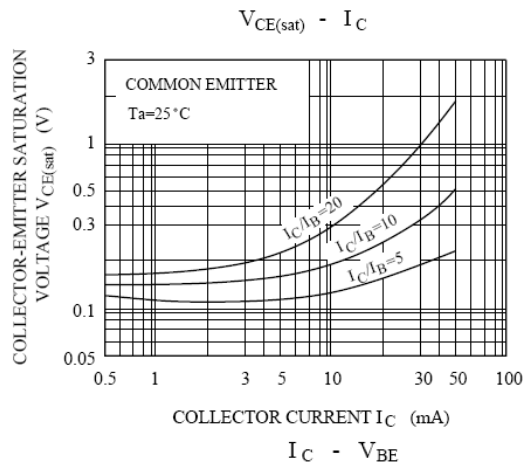
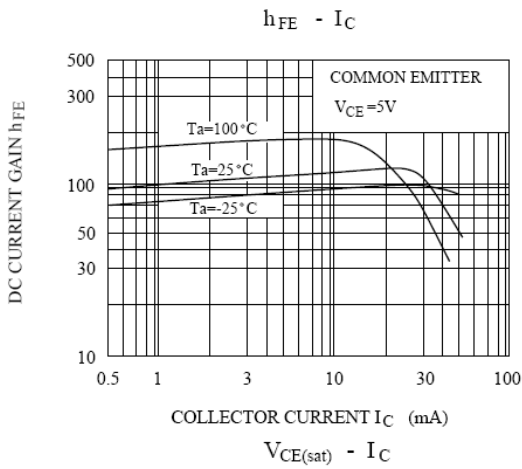
## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified





Triple Diffused NPN Transistor

KTC4372



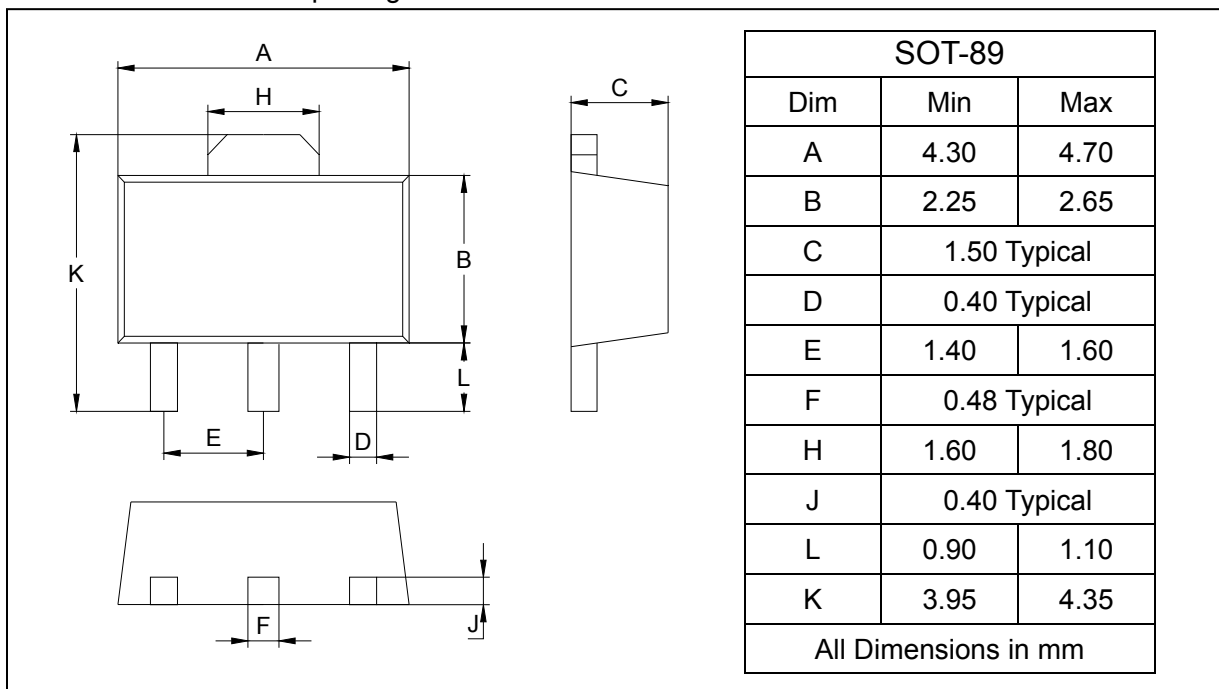
# Triple Diffused NPN Transistor

# KTC4372

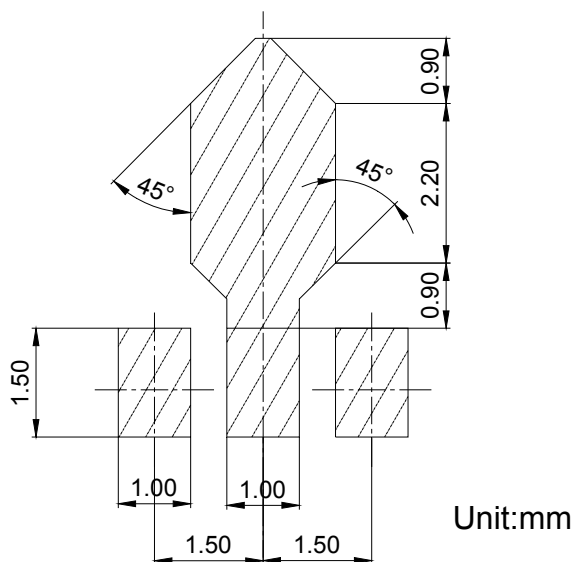
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
KTC4372	SOT-89	1000/Tape&Reel