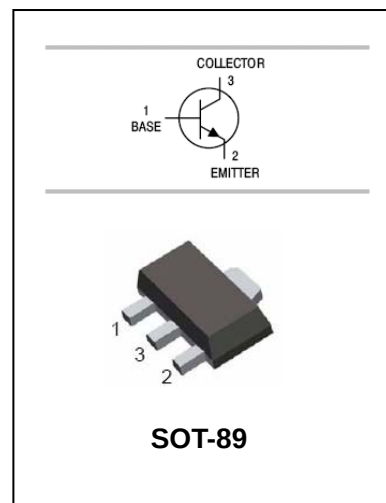


Triple Diffused NPN Transistor

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 (250mm2x0.8t)



Triple Diffused NPN Transistor

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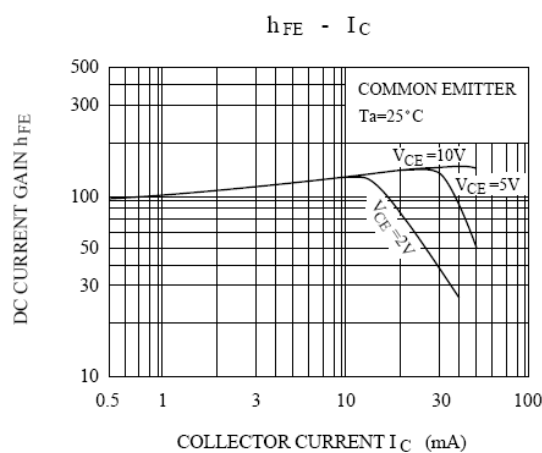
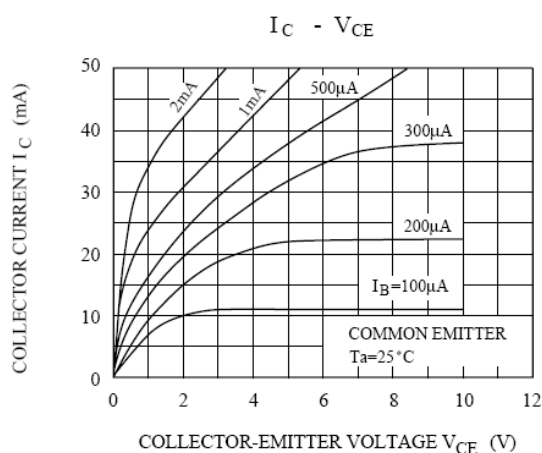
ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

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

CLASSIFICATION OF h_{FE}

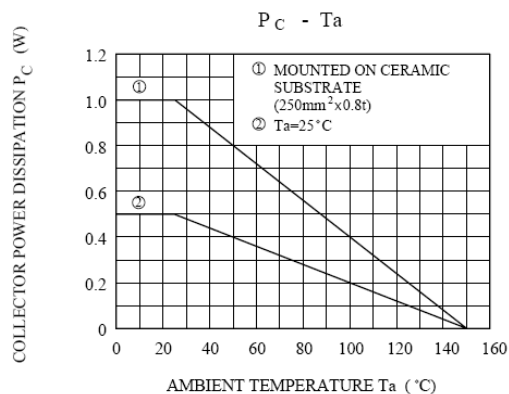
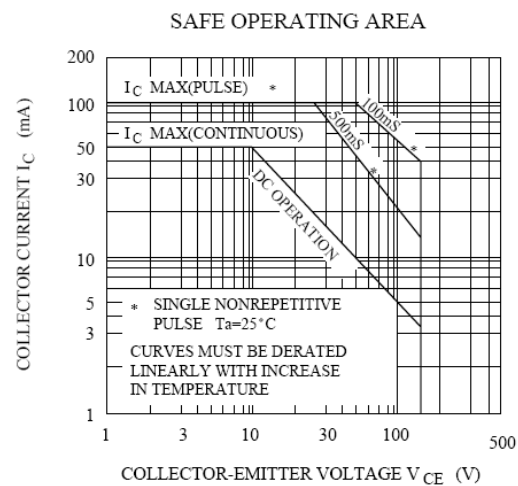
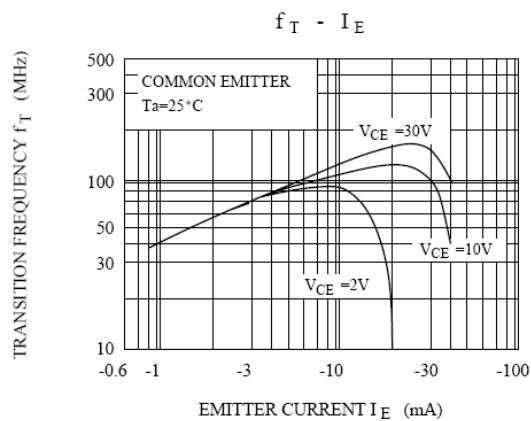
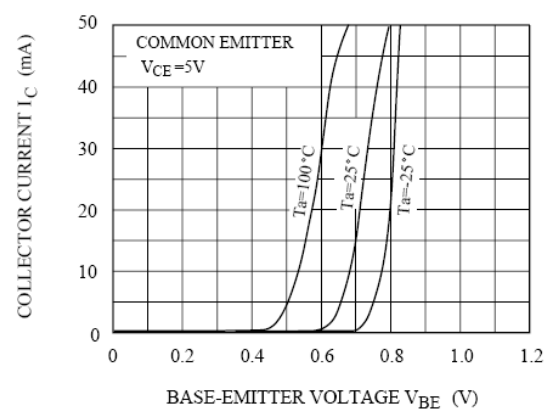
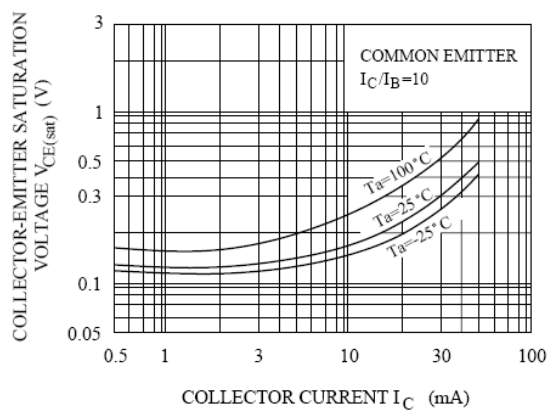
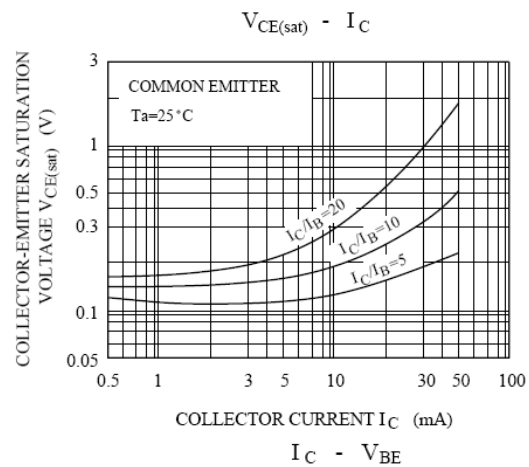
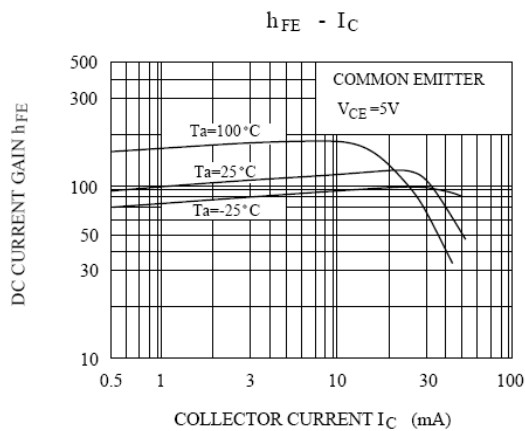
Rank	O	Y
Range	70-140	120-240
MARKING	AO	AY

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



Triple Diffused NPN Transistor

KTC4372



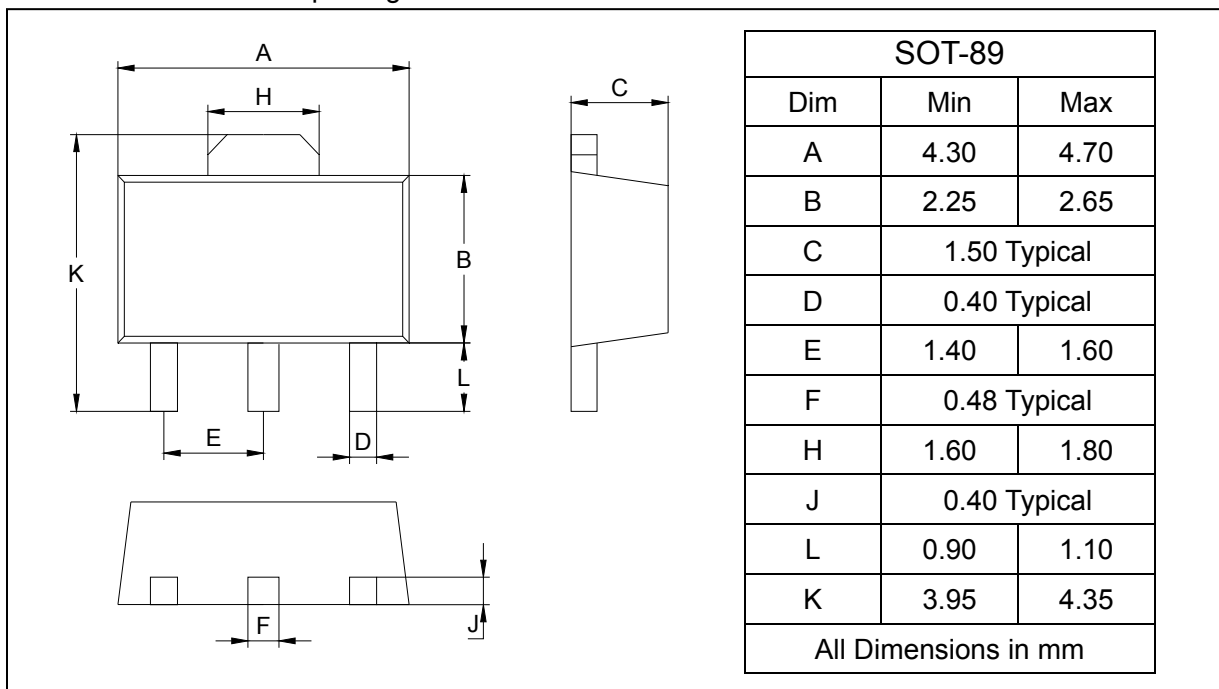
Triple Diffused NPN Transistor

KTC4372

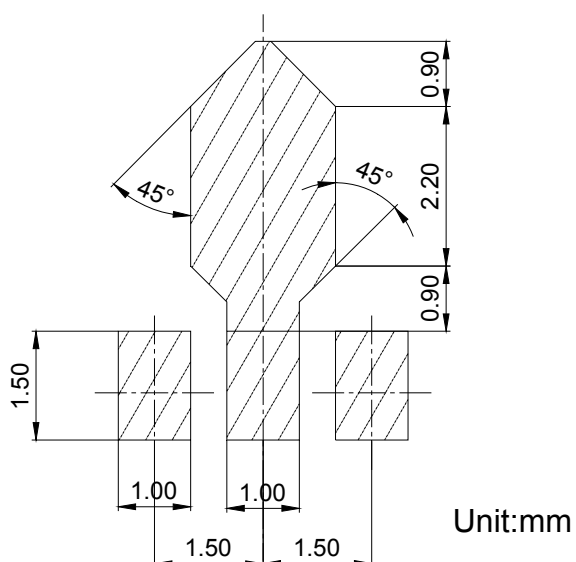
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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