



Micro Commercial Components  
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**KTC3199-O  
KTC3199-Y  
KTC3199-GR  
KTC3199-BL**

## Features

- High DC Current Gain:  $h_{FE}=70\sim700$
- Excellent  $h_{FE}$  Linearity:  $h_{FE}(0.1mA)/h_{FE}(2.0mA)=0.95$ (Typ)
- Low Noise:  $NF=1.0dB$ (Typ.),  $10dB$ (Max.)
- Complementary to KTA1267
- Marking: C3199
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

## Maximum Ratings

Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	50	V
$V_{CBO}$	Collector-Base Voltage	50	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current	150	mA
$I_E$	Emitter Current	150	A
$P_C$	Collector power dissipation	400	mW
$T_J$	Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C

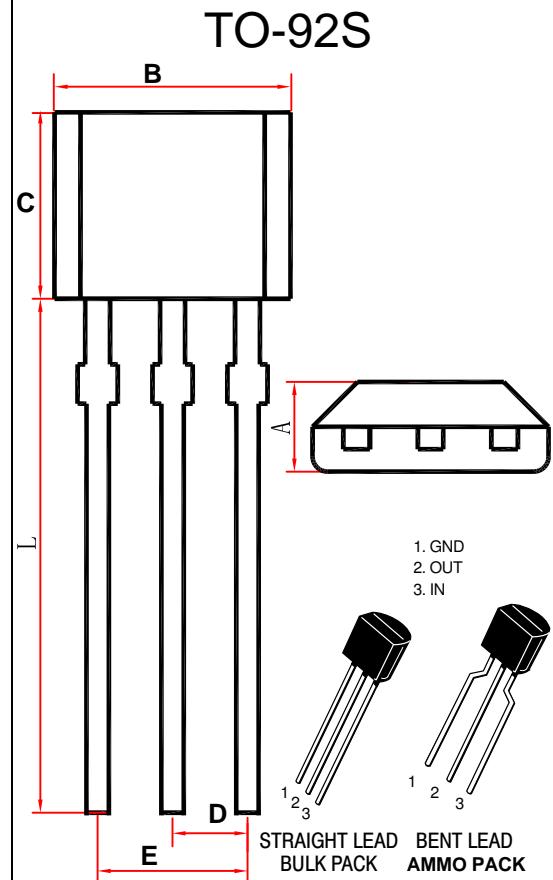
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
<b>OFF CHARACTERISTICS</b>					
$I_{CBO}$	Collector-Base Cutoff Current ( $V_{CB}=50Vdc, I_E=0$ )	---	---	0.1	uAdc
$I_{EBO}$	Emitter-Base Cutoff Current ( $V_{EB}=5.0Vdc, I_C=0$ )	---	---	0.1	uAdc

## ON CHARACTERISTICS

$h_{FE}$	DC Current gain <sup>(1)</sup> ( $I_C=2.0mA, V_{CE}=6.0Vdc$ )	70	---	700	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=100mA, I_E=10mA$ )	---	0.1	0.25	Vdc
$f_T$	Transistor Frequency ( $V_{CE}=10Vdc, I_C=1.0mA$ )	80	---	---	MHz
$C_{ob}$	Collector Output Capacitance ( $V_{CB}=10Vdc, I_E=0, f=1.0MHz$ )	---	2.0	3.5	pF
NF	Noise Figure ( $V_{CE}=6.0Vdc, I_E=0.1mA, f=1.0kHz, R_g=10KOHM$ )	---	1.0	10	dB

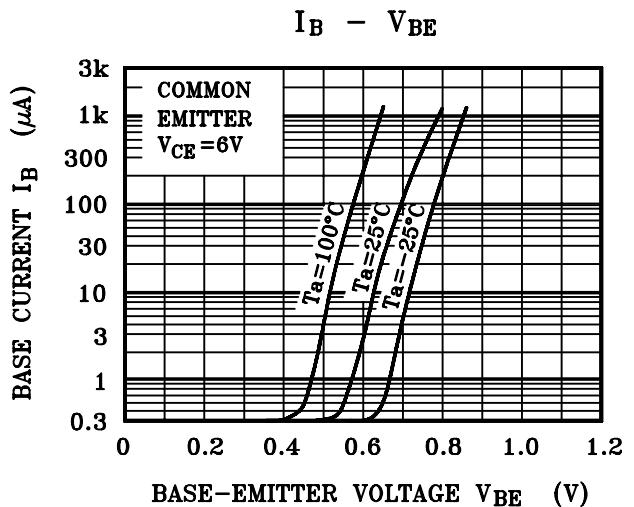
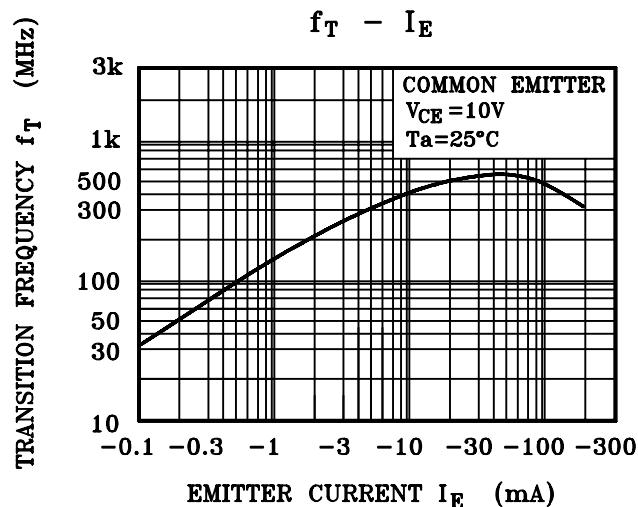
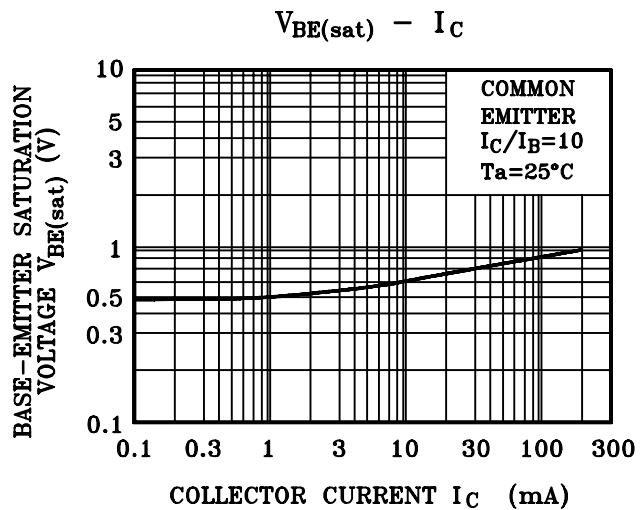
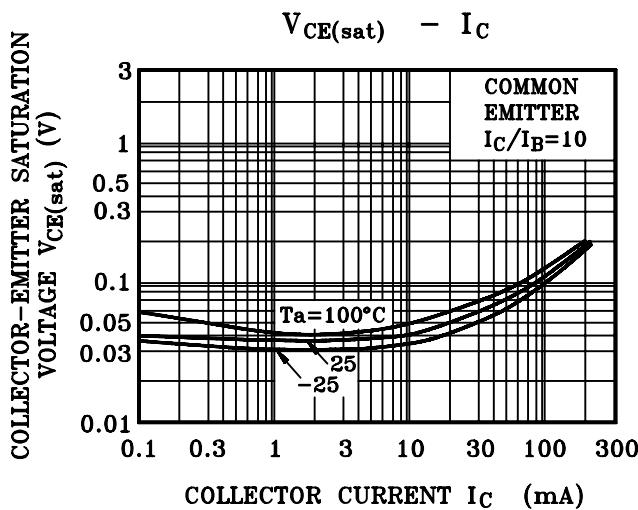
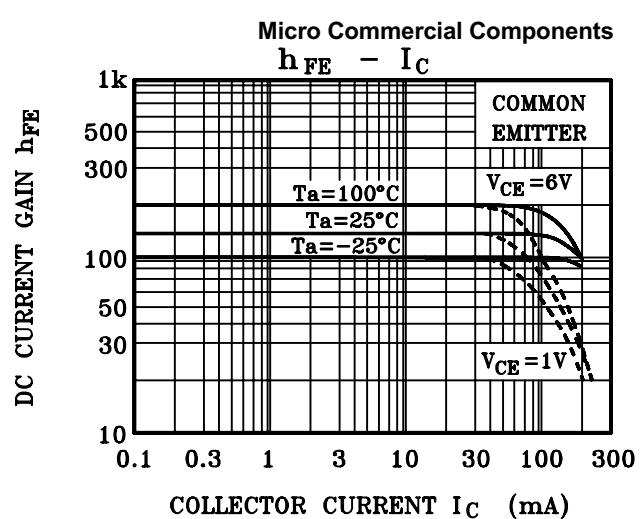
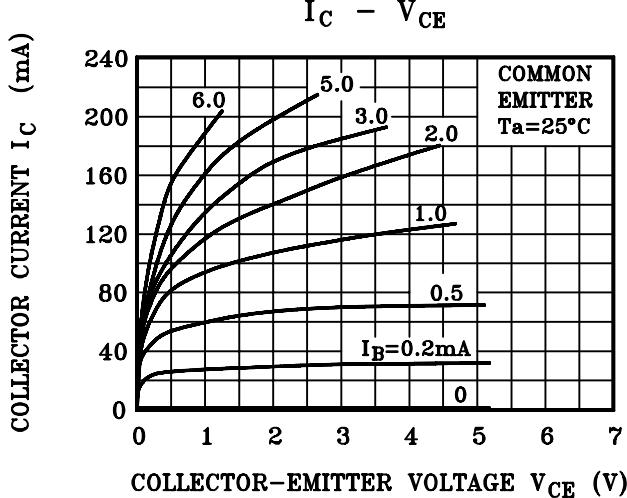
(1)  $h_{FE}$  Classification O: 70~140, Y: 120~240, GR: 200~400, BL: 300~700



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.056	.064	1.42	1.62	
B	.154	.161	3.90	4.10	
C	.120	.128	3.05	3.25	
D	.050		1.27		Straight Lead
	.086	.110	2.20	2.80	Bent Lead
E	.096	.104	2.44	2.64	Straight Lead
	.173	.220	4.40	5.60	Bent Lead
L	.594	.610	15.10	15.50	

\* For ammo packing detailed specification, click here to visit our website of product packaging for details.

# KTC3199

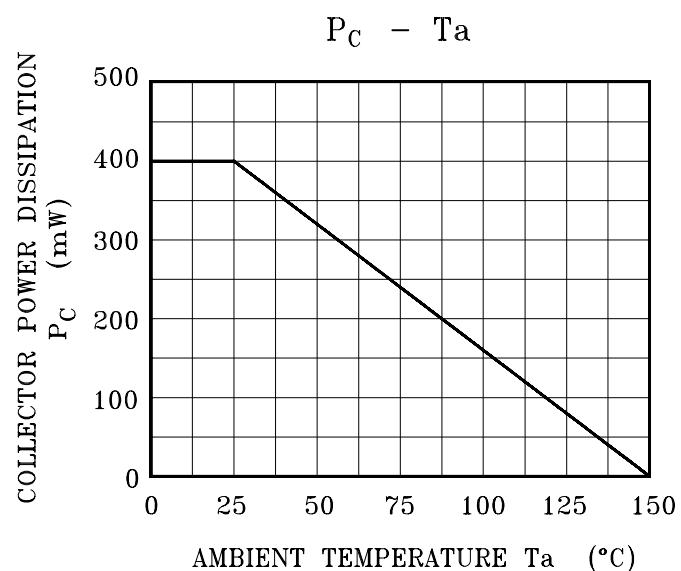


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## Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 30Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-AP-HF

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