



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	mA
P_C	Collector power dissipation	400	mW
T_J	Junction Temperature	-55 to +150	$^{\circ}C$
T_{STG}	Storage Temperature	-55 to +150	$^{\circ}C$

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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OFF CHARACTERISTICS

I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=50Vdc, I_E=0$)	---	---	0.1	μA_{dc}
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=5.0Vdc, I_C=0$)	---	---	0.1	μA_{dc}

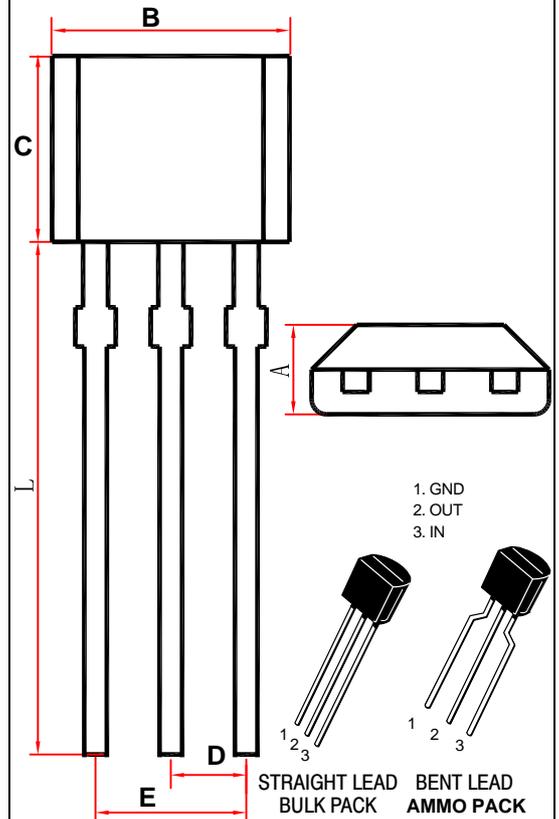
ON CHARACTERISTICS

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

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

NPN General Purpose Application

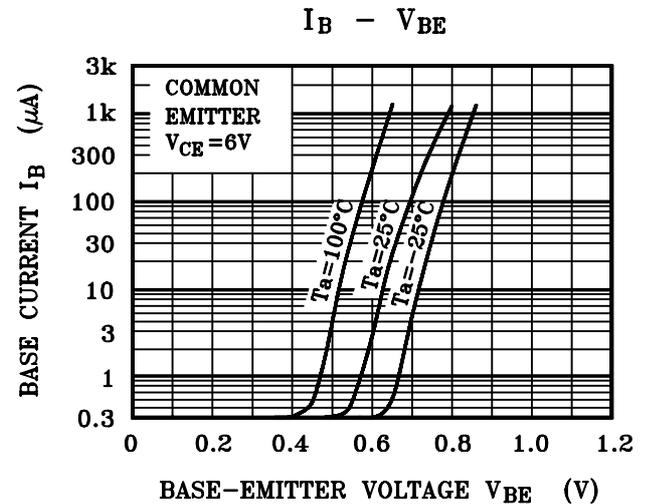
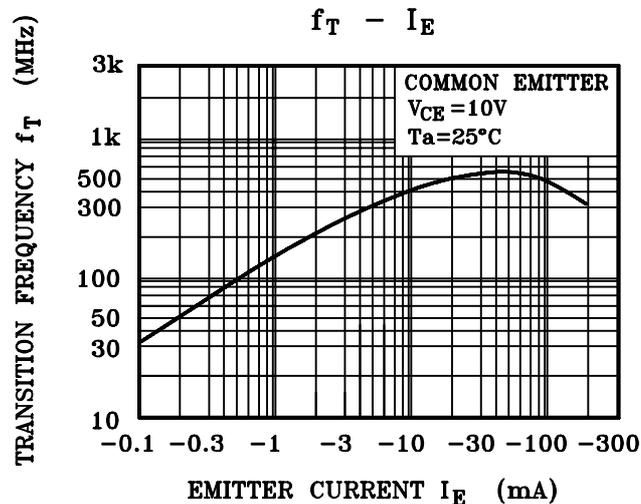
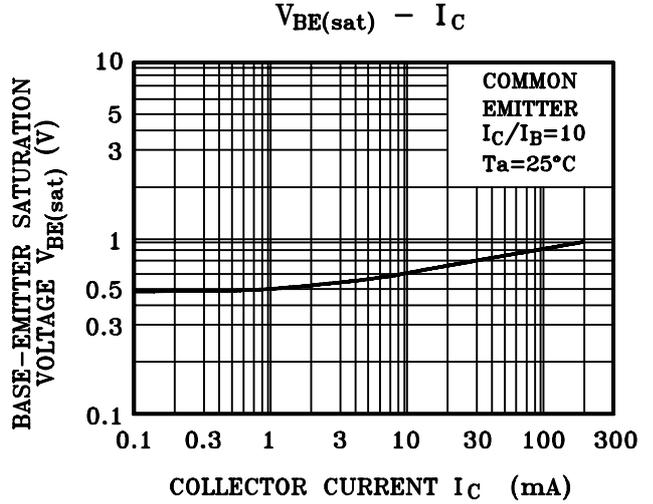
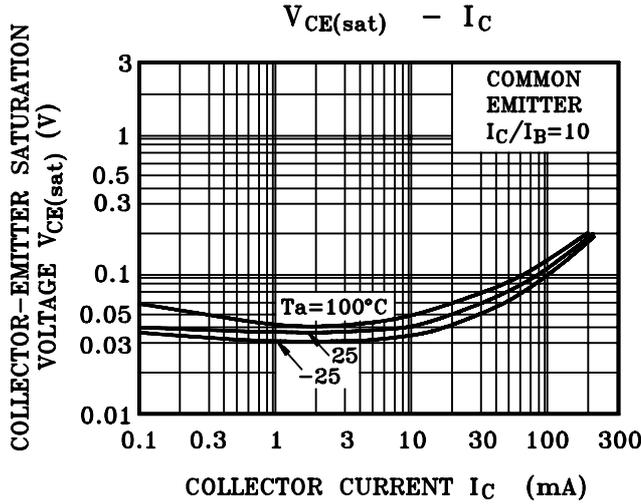
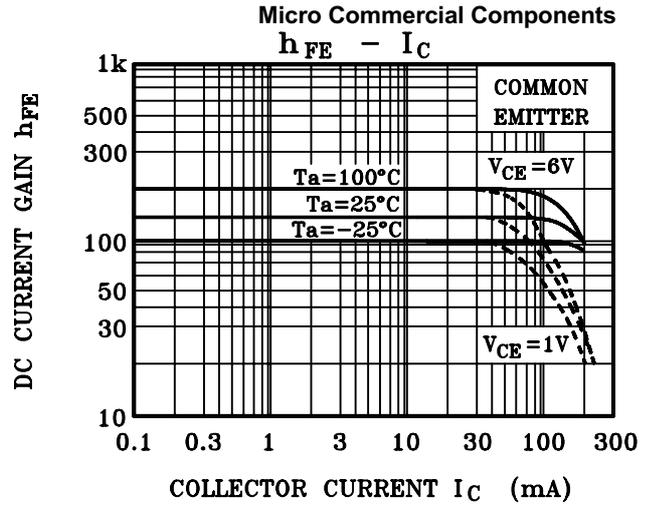
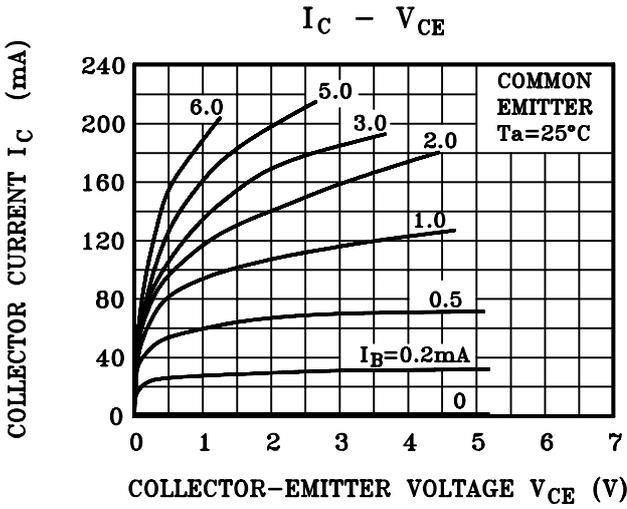
TO-92S



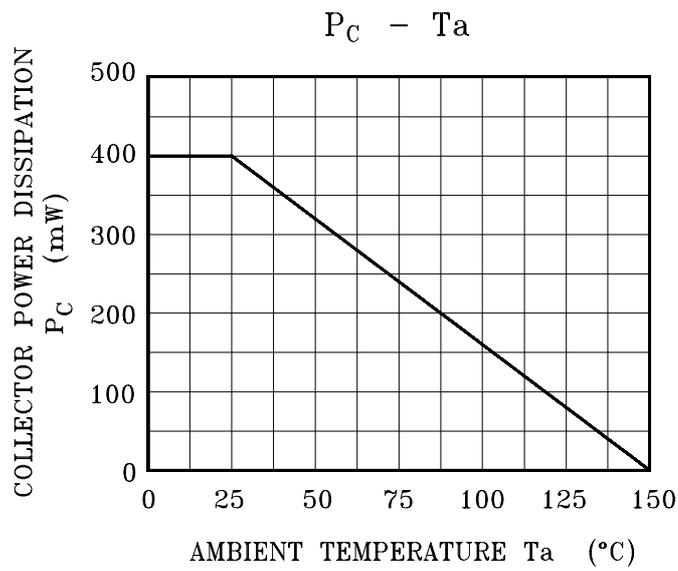
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.056	.064	1.42	1.62	
B	.154	.161	3.90	4.10	
C	.120	.128	3.05	3.25	
D	.050		1.27		Straight Lead
	.086	.110	2.20	2.80	
E	.096	.104	2.44	2.64	Straight Lead
	.173	.220	4.40	5.60	
L	.594	.610	15.10	15.50	

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

www.mccsemi.com



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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