



Micro Commercial Components



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KTC3875-Y KTC3875-GR

Features

- High h_{FE} and Low Noise
- Complementary to KTA1504
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	150	mA
P_C	Collector power dissipation	150	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
OFF CHARACTERISTICS					
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=60Vdc, I_E=0$)	---	---	0.1	μA_{dc}
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=5.0Vdc, I_C=0$)	---	---	0.1	μA_{dc}

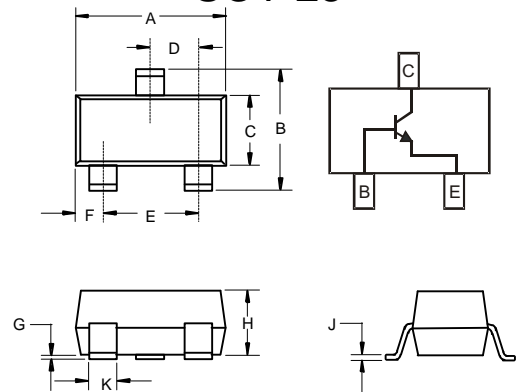
ON CHARACTERISTICS

h_{FE}	DC Current gain ⁽¹⁾ ($I_C=2mA_{dc}, V_{CE}=6.0Vdc$)	120	---	400	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=100mA_{dc}, I_B=10mA_{dc}$)	---	0.1	0.25	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=100mA_{dc}, I_B=10mA_{dc}$)	---	---	1.0	
f_T	Transistor Frequency ($V_{CE}=10Vdc, I_C=1mA_{dc}$)	80	---	---	MHz
C_{ob}	Collector Output Capacitance ($V_{CB}=10Vdc, I_E=0, f=1.0MHz$)	---	2.0	3.5	pF
NF	Noise Figure ($V_{CE}=6V, I_C=0.1mA, R_g=10k\Omega, f=1KHz$)	---	1.0	10	dB

(1) h_{FE} Classification Y: 120~240(Marking: ALY),
GR: 200~400(Marking: ALG)

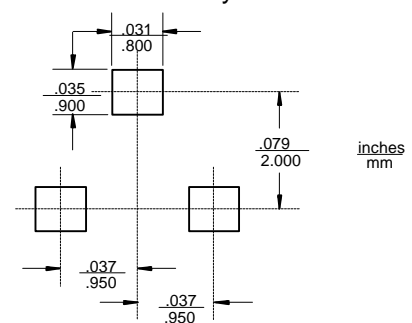
Epitaxial Planar NPN Transistors

SOT-23

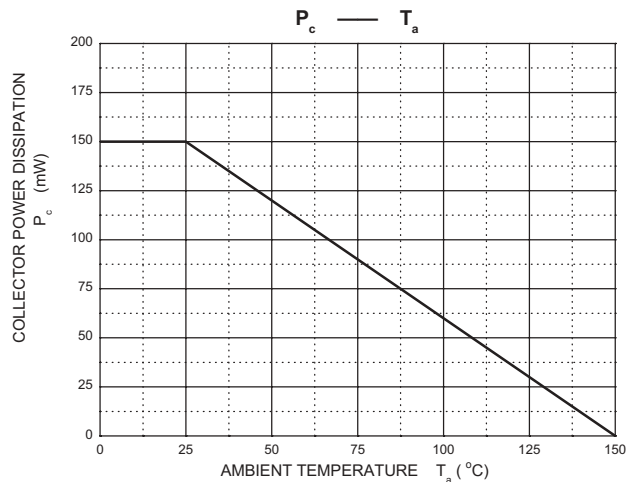
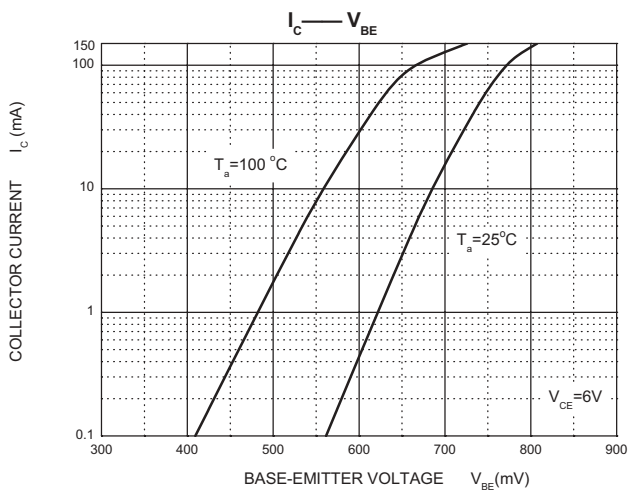
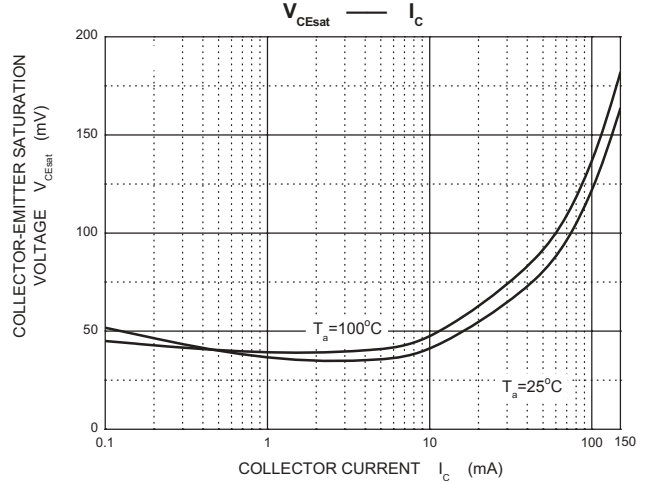
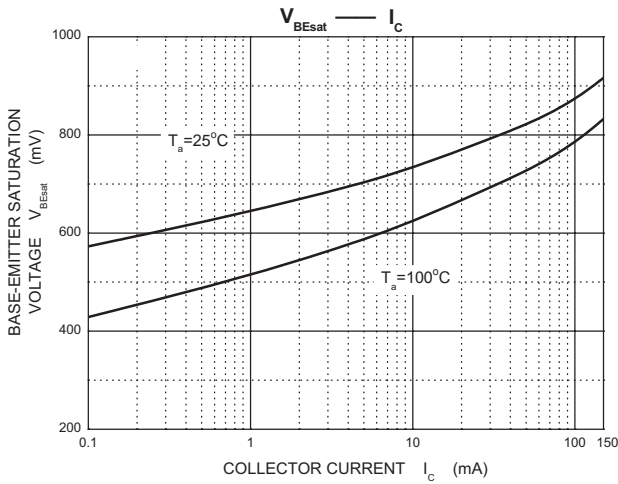
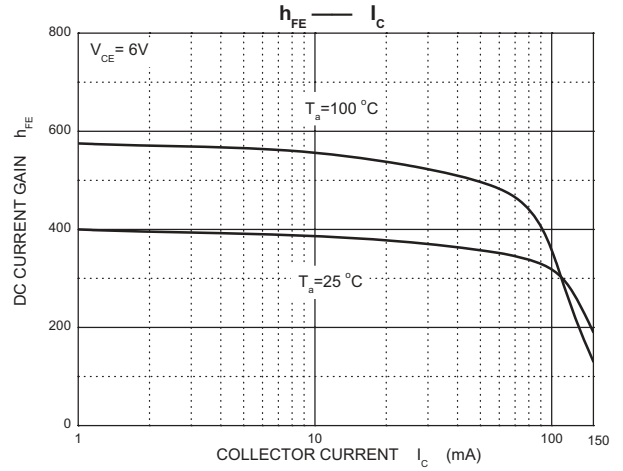
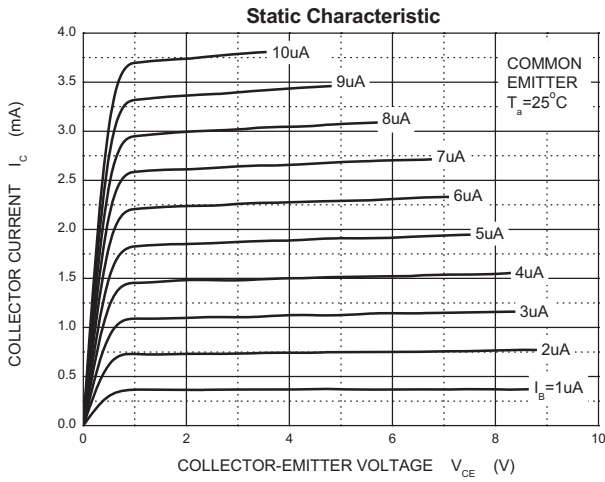


DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



Typical Characteristics





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

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

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