



KTC4075-O
KTC4075-Y
KTC4075-GR
KTC4075-BL

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Complementary to KTA2014
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- 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	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	150	mA
P_C	Collector power dissipation	100	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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OFF CHARACTERISTICS

I_{CBO}	Collector Cutoff Current ($V_{CB} = 60Vdc$)	---	---	100	nAdc
I_{EBO}	Emitter Cutoff Current ($V_{EB} = 5.0Vdc$)	---	---	100	nAdc

ON CHARACTERISTICS

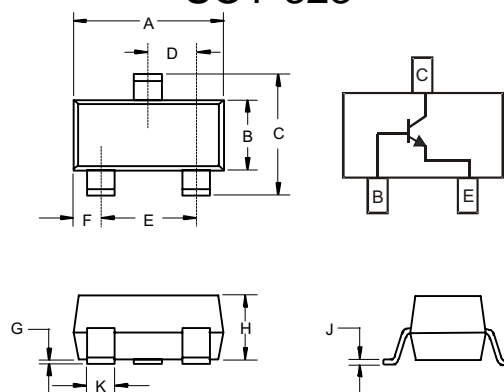
BV_{CBO}	Collector-base breakdown voltage ($I_C = 100\mu Adc$)	60	---	---	Vdc
BV_{CEO}	Collector-emitter breakdown voltage ($I_C = 1mAdc$)	50	---	---	Vdc
BV_{EBO}	Emitter-base breakdown voltage ($I_E = 100\mu Adc$)	5	---	---	Vdc
h_{FE}	DC Current Gain ($I_C = 2mAdc$, $V_{CE} = 6.0Vdc$)	70	---	700	---
$V_{CE(sat)}$	Collector Saturation Voltage ($I_C = 100mAdc$, $I_B = 10.0mAdc$)	---	---	0.25	Vdc
C_{ob}	Output Capacitance ($V_{CE} = 10.0Vdc$, $I_E = 0$, $f = 1.0MHz$)	---	---	3.5	pF
f_T	Gain Bandwidth product ($V_{CE} = 10Vdc$, $I_C = 1mAdc$)	---	80	---	MHz

h_{FE} CLASSIFICATION

Rank	O	Y	GR	BL
Marking	LO	LY	LGR	LBL
Range	70-140	120-240	200-400	350-700

NPN Plastic-Encapsulate Transistors

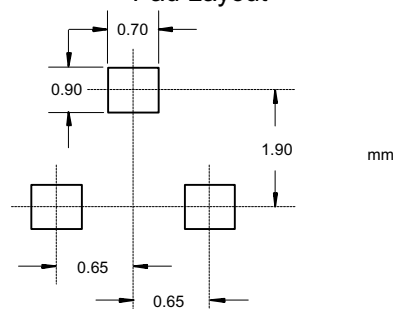
SOT-323



DIMENSIONS

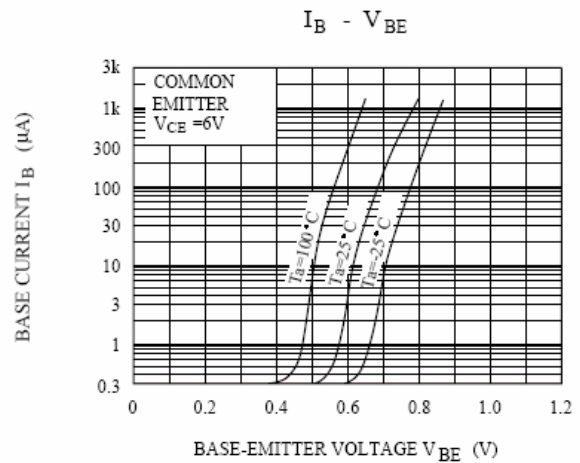
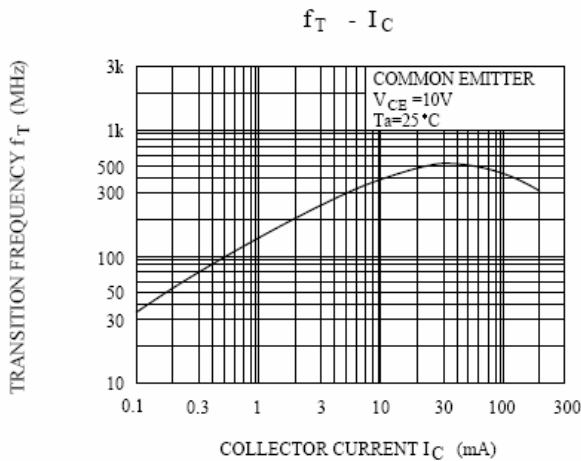
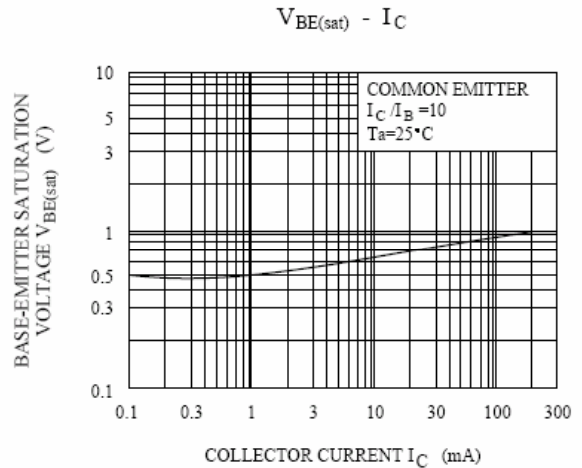
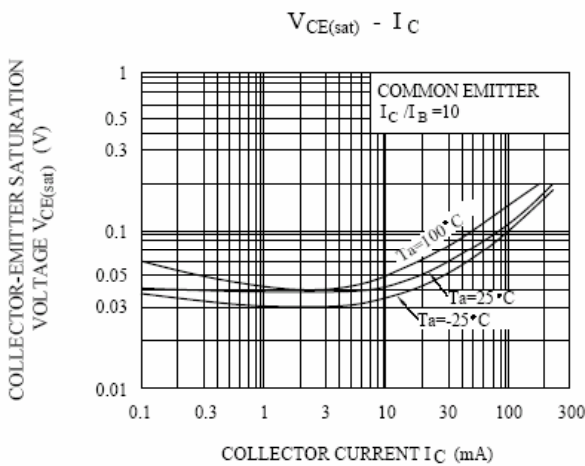
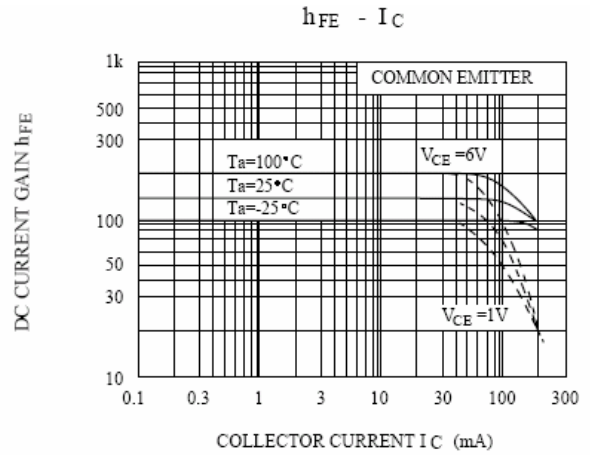
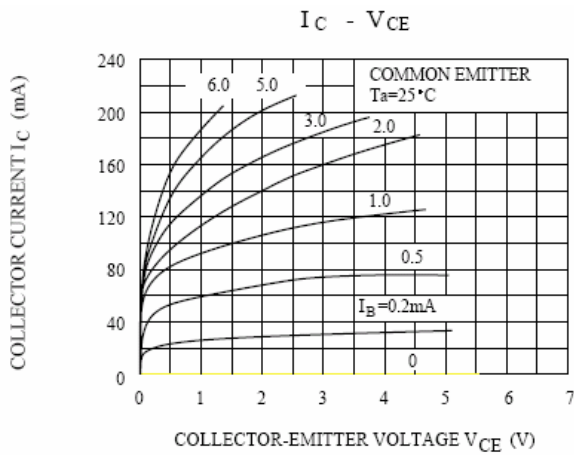
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

Suggested Solder Pad Layout



KTC4075

Typical Characteristics



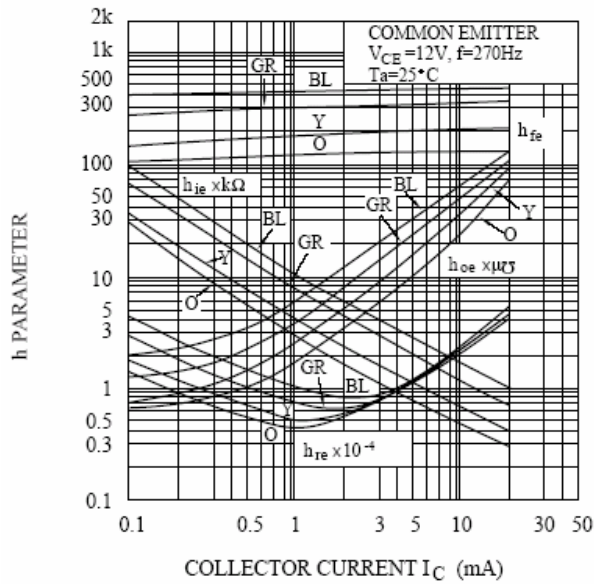
KTC4075

Typical Characteristics

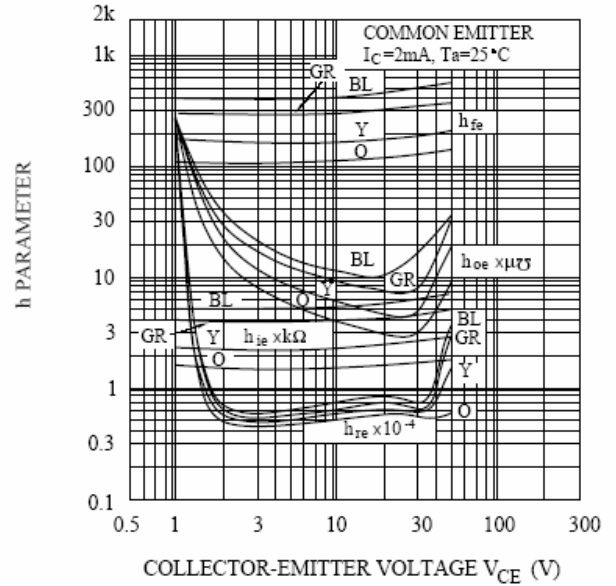
M.C.C.

Micro Commercial Components

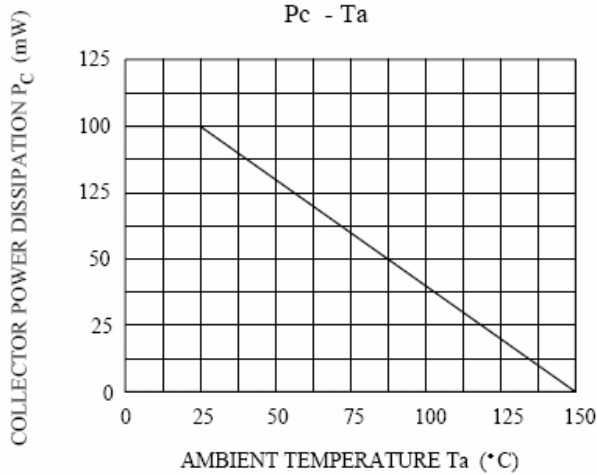
h PARAMETER - I_C



h PARAMETER - V_{CE}



P_c - T_a



www.mccsemi.com

Ordering Information :

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

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

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