

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 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
- Moisure 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	V
Ic	Collector Current	150	mA
Pc	Collector power dissipation	100	mW
TJ	Junction Temperature 150		$^{\circ}$
T <sub>STG</sub>	Storage Temperature	-55 to +150	$^{\circ}\!\mathbb{C}$

### Electrical Characteristics @ $25^{\circ}$ Unless Otherwise Specified

Symbol	Parameter	Min	Тур	Max	Units
OFF CHARACTERISTICS					
I <sub>CBO</sub>	Collector Cutoff Current (V <sub>CB</sub> = 60Vdc)			100	nAdc
I <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> = 5.0Vdc)			100	nAdc

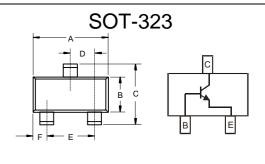
### **ON CHARACTERISTICS**

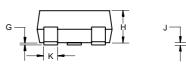
0.1 0.1						
BV <sub>CBO</sub>	Collector-base breakdown voltage (I <sub>c</sub> =100µAdc)	60			Vdc	
BV <sub>CEO</sub>	Collector-emitter breakdown voltage (I <sub>C</sub> = 1mAdc)	50			Vdc	
BV <sub>EBO</sub>	Emitter-base breakdown voltage (I <sub>E</sub> =100µAdc)	5			Vdc	
h <sub>FE</sub>	DC Current Gain (I <sub>C</sub> =2mAdc, V <sub>CE</sub> = 6.0Vdc)	70		700		
$V_{\text{CE(sat)}}$	Collector Saturation Voltage (I <sub>C</sub> =100mAdc, I <sub>B</sub> =10.0mAdc)			0.25	Vdc	
Сов	Output Capacitance (V <sub>CE</sub> = 10.0Vdc, I <sub>E</sub> =0, f=1.0MHz)			3.5	pF	
f <sub>⊤</sub>	Gain Bandwidth product (V <sub>CE</sub> =10Vdc, I <sub>C</sub> =1mAdc)		80		MHz	

### **hfe CLASSIFICATION**

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Rank	0	Υ	GR	BL	
Marking	LO	LY	LGR	LBL	
Range	70-140	120-240	200-400	350-700	

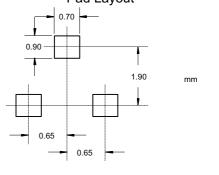
# NPN Plastic-Encapsulate Transistors





DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.071	.087	1.80	2.20	
В	.045	.053	1.15	1.35	
С	.079	.087	2.00	2.20	
D	.026 Nominal		0.65Nominal		
Ш	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
Τ	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

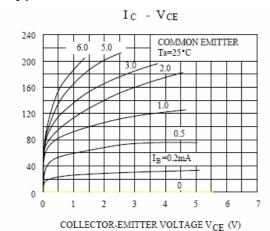
### Suggested Solder Pad Layout



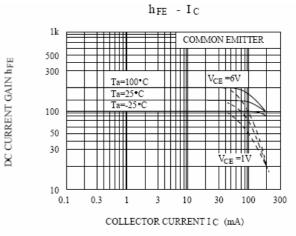


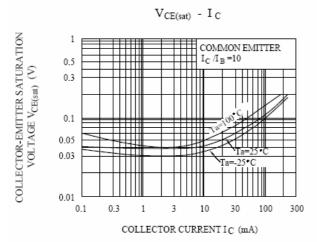
## KTC4075 Typical Characteristics

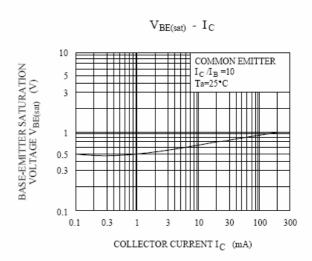
COLLECTOR CURRENT IC (mA)

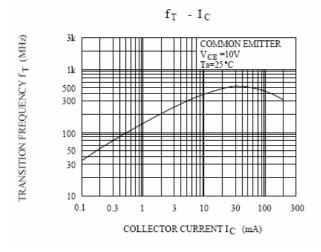


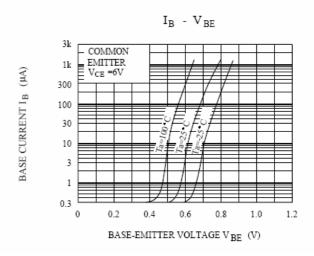
**Micro Commercial Components** 





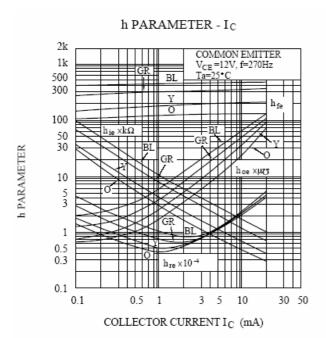


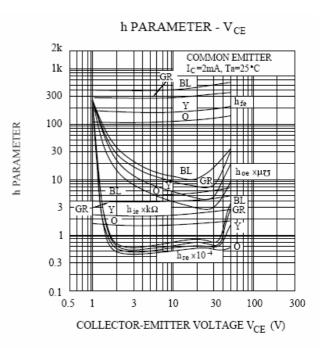


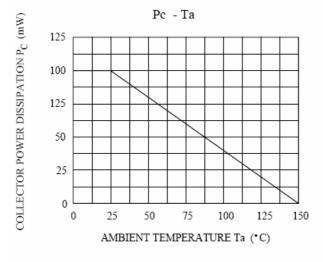


# KTC4075 Typical Characteristics











#### **Micro Commercial Components**

### **Ordering Information:**

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

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