



Micro Commercial Components



Micro Commercial Components  
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**KTA2014-O**  
**KTA2014-Y**  
**KTA2014-GR**

## Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Low frequency power amplifier application
- Power switching application
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings @ 250C Unless Otherwise Specified

Symbol	Rating	Rating	Unit
V <sub>CEO</sub>	Collector-Emitter Voltage	-50	V
V <sub>CBO</sub>	Collector-Base Voltage	-50	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current-Continuous	150	mA
P <sub>C</sub>	Collector Dissipation	100	mW
T <sub>J</sub>	Operating Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

### Electrical Characteristics @ 25°C Unless Otherwise Specified

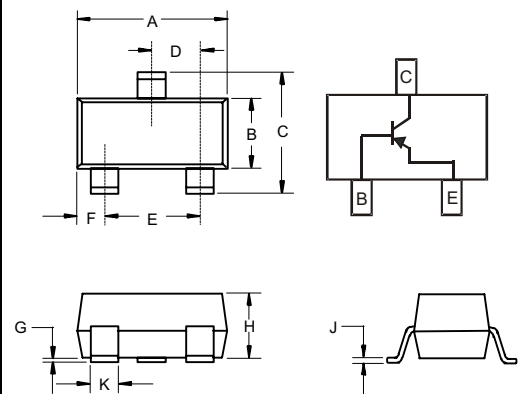
Symbol	Parameter	Min	Typ	Max	Units
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage (I <sub>C</sub> =-1mA, I <sub>B</sub> =0)	-50	---	---	Vdc
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>C</sub> =-0.1mA, I <sub>E</sub> =0)	-50	---	---	Vdc
V <sub>(BR)EBO</sub>	Collector-Emitter Breakdown Voltage (I <sub>E</sub> =-0.1mA, I <sub>C</sub> =0)	-5	---	---	Vdc
I <sub>CBO</sub>	Collector Cutoff Current (V <sub>CB</sub> =-50Vdc, I <sub>E</sub> =0)	---	---	-0.1	uA
I <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =-5Vdc, I <sub>C</sub> =0)	---	---	-0.1	uA
h <sub>FE</sub>	DC Current Gain (V <sub>CE</sub> =-6Vdc, I <sub>C</sub> =-2mA)	70	---	400	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA)	---	---	-0.3	Vdc
C <sub>ob</sub>	Output Capacitance (V <sub>CB</sub> =-10.0Vdc, I <sub>E</sub> =0, f=1.0MHz)	---	---	7	pF
f <sub>T</sub>	Transition frequency (V <sub>CE</sub> =-10Vdc, I <sub>C</sub> =-1mA)	80	---	---	MHz

### h<sub>FE</sub> CLASSIFICATION

Rank	O	Y	GR
Marking	SO	SY	SG
h <sub>FE</sub>	70~120	120~240	200~400

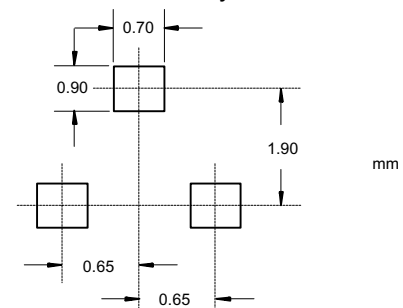
**PNP**  
**Plastic-Encapsulate**  
**Transistors**

### SOT-323



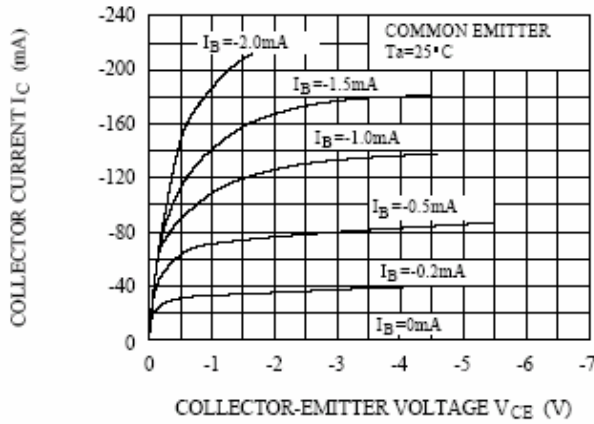
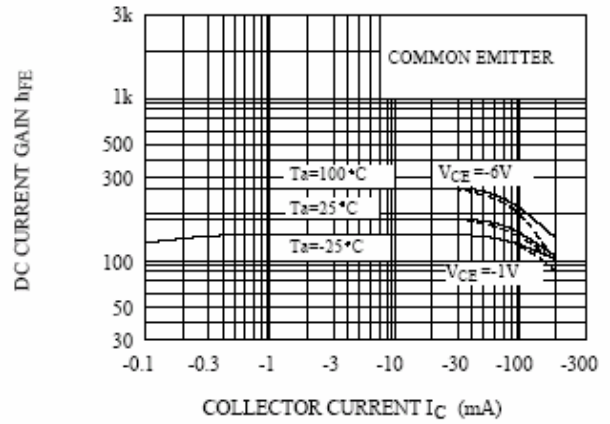
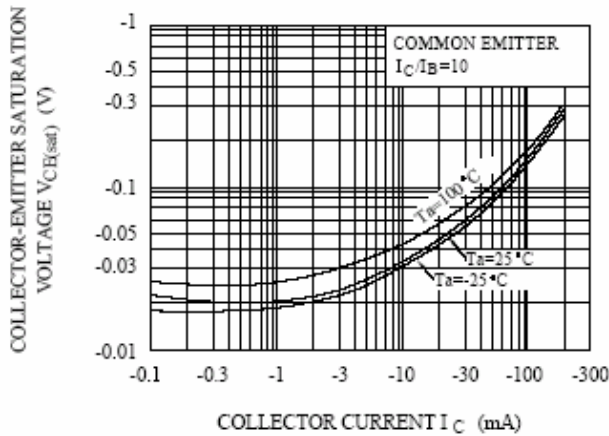
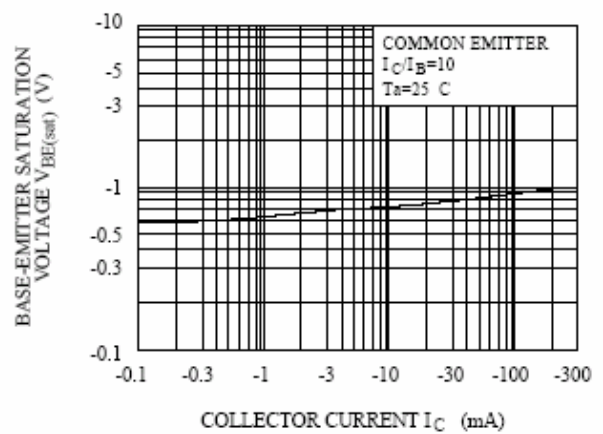
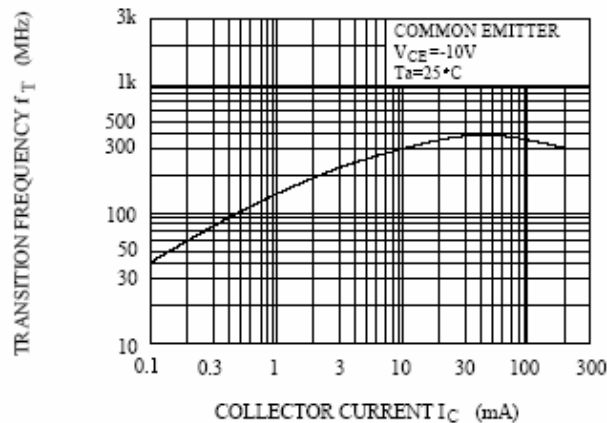
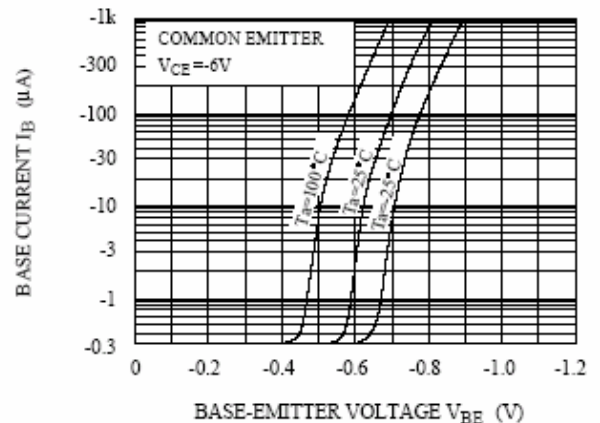
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

### Suggested Solder Pad Layout



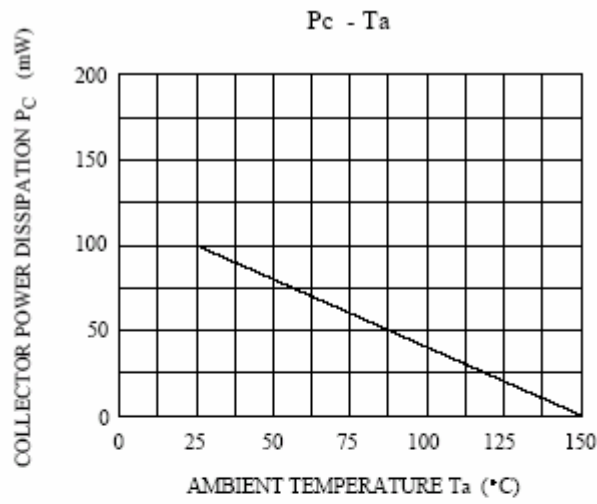
## KTA2014

## Typical Characteristics

 $I_C - V_{CE}$ 

 $h_{FE} - I_C$ 

 $V_{CE(sat)} - I_C$ 

 $V_{BE(sat)} - I_C$ 

 $f_T - I_C$ 

 $I_B - V_{BE}$ 


# KTA2014

## 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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