

Pb

Micro Commercial Components

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CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 **KTC4373**

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Low noise
- Excellent h_{FE} linearity
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1

Maximum Ratings

| Symbol | Rating | Rating | Unit |
|------------------|-----------------------------|-------------------------|------------|
| V_{CEO} | Collector-Emitter Voltage | 120 | V |
| V_{CBO} | Collector-Base Voltage | 120 | V |
| V_{EBO} | Emitter-Base Voltage | 5 | V |
| Ic | Collector Current | 0.8 | Α |
| Pc | Collector power dissipation | 0.5 | W |
| TJ | Junction Temperature | inction Temperature 150 | |
| T _{STG} | Storage Temperature | -55 to +150 | $^{\circ}$ |

Electrical Characteristics @ 25° C Unless Otherwise Specified

| Symbol | Parameter | Min | Тур | Max | Units |
|---------------------|---|-----|-----|-----|-------|
| OFF CHARACTERISTICS | | | | | |
| I _{CBO} | Collector Cutoff Current (V _{CB} = 120Vdc) | | | 100 | nAdc |
| I _{EBO} | Emitter Cutoff Current (V _{EB} = 5.0Vdc) | | | 100 | nAdc |

ON CHARACTERISTICS

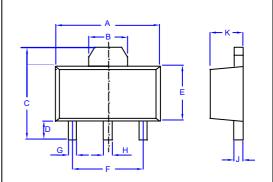
| BV _{CBO} | Collector-base breakdown voltage (I _c =1mAdc) | 120 | | | Vdc |
|----------------------|--|-----|-----|-----|-----|
| BV _{CEO} | Collector-emitter breakdown voltage (I _C = 10mAdc) | 120 | | | Vdc |
| BV _{EBO} | Emitter-base breakdown voltage (I _E =1mAdc) | 5 | - | - | Vdc |
| h _{FE} | DC Current Gain (I _C =0.1Adc, V _{CE} = 5 .0Vdc) | 80 | | 240 | |
| $V_{\text{CE(sat)}}$ | Collector Saturation Voltage (I _c =0.5Adc, I _B =50mAdc) | | | 1 | Vdc |
| Сов | Output Capacitance (V _{CE} = 10.0Vdc, I _E =0, f=1.0MHz) | | | 30 | pF |
| f _⊤ | Transition frequency $(V_{CE}=5Vdc, I_{C}=500mAdc)$ | | 120 | | MHz |

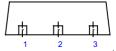
hfe Classification

| Rank | 0 | Υ |
|---------|--------|---------|
| Marking | CO | CY |
| Range | 80-160 | 120-240 |

NPN Plastic-Encapsulate Transistors

SOT-89





- 1. BASE
- 2. COLLECTOR
- 3. EMITTER

| DIMENSINS | | | | | |
|-----------|--------|--------|--------|--------|------------------|
| DIM | INCHES | | MM | | NOTES |
| | MIN | MAX | MIN | MAX | |
| Α. | .173 . | .181 . | 4.39 . | 4.60 | |
| В | .061 | | 1.55 | | REF. |
| C. | .154 . | .165 . | 3.91 | 4.25. | |
| D | .031 | .039 | 0.80 | 1.00 | |
| E | .092 | .100 | 2.34 | 2.54 | |
| F | .118 | | 3.00 | | TYP |
| G | .013 | .019 | 0.33 | 0.48 | |
| Н. | .015 | .021 . | 0.38 . | 0.53 . | |
| J | .015 | .016 | 0.38 | 0.41 | , and the second |
| Κ. | .055 . | .063 . | 1.40 . | 1.60 . | |

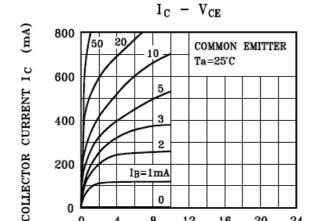
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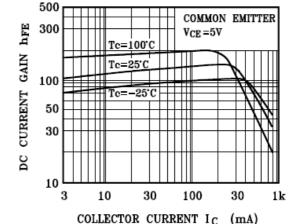
Typical Characteristics



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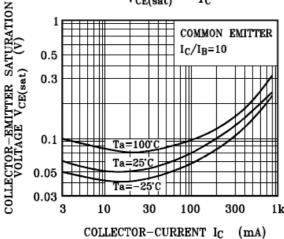
12 COLLECTOR-EMITTER VOLTAGE VCE

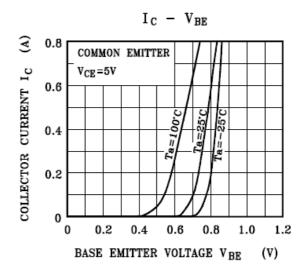
16

20

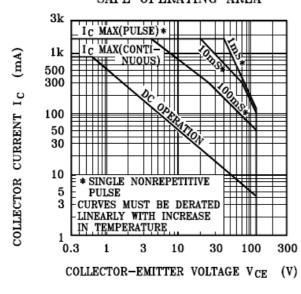
24

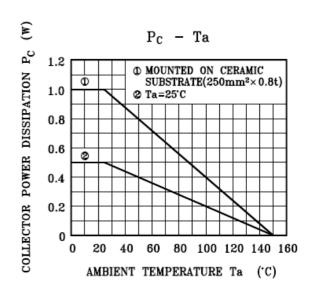






SAFE OPERATING AREA







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Ordering Information:

| Device | Packing |
|----------------|---------------------|
| Part Number-TP | Tape&Reel1Kpcs/Reel |

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