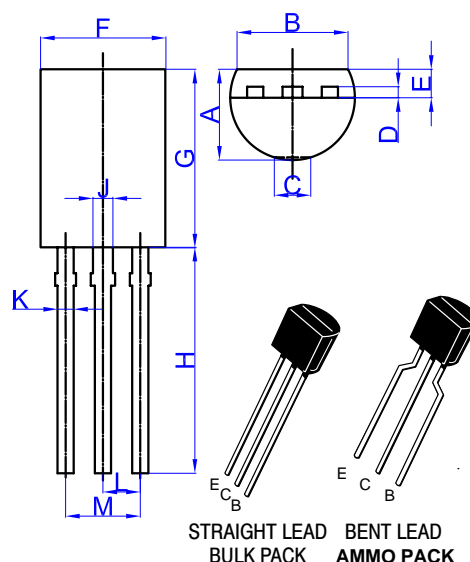




KTC3205

NPN Plastic-Encapsulate Transistor

TO-92L



Features

- Power Dissipation: 1W ($T_{amb}=25^{\circ}C$)
- Collector Current: 2A
- Collector-base Voltage: 30V
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: C3205
- Lead Free Finish/Rohs Compliant ("P" Suffix designates Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

| Symbol | Rating | Rating | Unit |
|-----------|--------------------------------|-------------|-------------|
| V_{CEO} | Collector-Emitter Voltage | 30 | V |
| V_{CBO} | Collector-Base Voltage | 30 | V |
| V_{EBO} | Emitter-Base Voltage | 5.0 | V |
| I_C | Collector Current | 2 | A |
| P_C | Collector Power Dissipation | 1000 | mW |
| T_J | Operating Junction Temperature | -55 to +150 | $^{\circ}C$ |
| T_{STG} | Storage Temperature | -55 to +150 | $^{\circ}C$ |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Typ | Max | Units |
|--------|-----------|-----|-----|-----|-------|
|--------|-----------|-----|-----|-----|-------|

OFF CHARACTERISTICS

| | | | | | |
|-----------|---|-----|-----|-----|--------------|
| I_{CBO} | Collector Cutoff Current ($V_{CB}=30Vdc, I_E=0$) | --- | --- | 0.1 | μA_{dc} |
| I_{EBO} | Emitter Cutoff Current ($V_{EB}=5.0Vdc, I_C=0$) | --- | --- | 0.1 | μA_{dc} |

ON CHARACTERISTICS

| | | | | | |
|---------------|---|-----|-----|-----|-----|
| h_{FE-2} | DC Current gain ⁽¹⁾ ($I_C=500mA_{dc}, V_{CE}=2Vdc$) | 100 | --- | 320 | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C=1.5mA_{dc}, I_B=30mA_{dc}$) | --- | --- | 2.0 | Vdc |
| V_{BE} | Base- Emitter Voltage ($I_C=500mA_{dc}, V_{CE}=2Vdc$) | --- | --- | 1.0 | Vdc |
| f_T | Transistor Frequency ($I_C=500mA_{dc}, V_{CE}=2Vdc$) | --- | 120 | --- | MHz |
| C_{ob} | Collector Output Capacitance ($V_{CB}=10Vdc, I_E=0, f=1.0MHz$) | --- | 13 | --- | pF |

(1) h_{FE} Classification O: 100~200, Y: 160~320

| DIM | MM | | INCHES | | NOTE |
|-----|-------|-------|--------|-------|---------------|
| | MIN | MAX | MIN | MAX | |
| A | 3.700 | 4.100 | .146 | .161 | |
| B | 4.000 | --- | .157 | --- | |
| C | 0.000 | 0.300 | 0.000 | 0.012 | |
| D | 0.350 | 0.450 | .014 | .018 | |
| E | 1.280 | 1.580 | .050 | .062 | |
| F | 4.700 | 5.100 | .185 | .201 | |
| G | 7.800 | 8.200 | .307 | .323 | |
| H | 13.80 | 14.20 | .543 | .559 | |
| J | .600 | .800 | .024 | .031 | |
| K | 0.350 | .550 | .014 | .022 | |
| L | 1.270 | | .050 | | Straight Lead |
| | 2.200 | 2.800 | .086 | .110 | Bent Lead |
| M | 2.440 | 2.640 | .096 | .104 | Straight Lead |
| | 4.400 | 5.600 | .173 | .220 | Bent Lead |

* For ammo packing detailed specification, click here to visit our website of product packaging for details.



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Ordering Information :

| Device | Packing |
|----------------|------------------------------|
| Part Number-AP | Ammo Packing: 2Kpcs/Ammo Box |
| Part Number-BP | Bulk: 50Kpcs/Carton |

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