

Micro Commercial Components



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TIP32/32A/32B/32C

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
 The complementary NPN types are the TIP31 respectively
 Epoxy meets UL 94 V-0 flammability rating

- Moisure Sensitivity Level 1

Marking: Part Number Mounting Torgue: 5 in-lbs Maximum Absolute Maximum Ratings @ T_a = 25°C (unless otherwise noted)

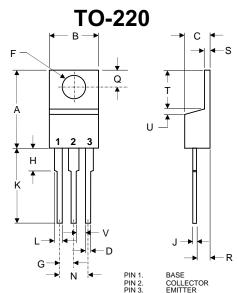
| Symbol | Parameter | Value | Unit |
|---|--|---------------------------|--------------|
| V _{CBO} TIP32 TIP32A TIP32B TIP32C | Collector-base voltage (Open emitter) | -40 -60 -80 -100 | V |
| V _{CEO} TIP32 TIP32A TIP32B TIP32C | Collector-emitter voltage (Open base) | -40 -60 -80 -100 | V |
| V _{EBO} | Emitter-base Voltage (Open collector) | -5 | V |
| Ic | Collector Current | -3 | Α |
| I _{CM} | Collector Current Pulse | -5 | Α |
| Ι _Β | Base Current | -1 | Α |
| D | Total Device Dissipation(Ta=25°C) | 2 | W |
| Pc | Total Device Dissipation(Tc=25°C) | 40 | W |
| TJ | Junction Temperature | 150 | $^{\circ}$ C |
| T _{STG} | Storage Temperature Range | -65 to +150 | °C |

Flectrical Characteristics @ 25°C Unless Otherwise Specified

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|--|--|---------------------------|------|-------|--|--|
| Symbol | Parameter | Min | Max | Units | | |
| V _{CEO(SUS)} TIP32 TIP32A TIP32B TIP32C | Collector-emitter sustaining voltage (I _C =-30mA; I _B =0) | -40 -60 -80 -100 | | V | | |
| V _{CE(sat)} | Collector-emitter Saturation Voltage (I_C =-3A I_B =-0.375A) | | -1.2 | V | | |
| V_{BE} | Base-emitter Voltage (I _C =-3A; V _{CE} =-4V) | | -1.8 | ٧ | | |
| I _{CES} TIP32 TIP32A TIP32B TIP32C | Collector cut-off current $(V_{CE}=-40V; V_{EB}=0)$ $(V_{CE}=-60V; V_{EB}=0)$ $(V_{CE}=-80V; V_{EB}=0)$ $(V_{CE}=-100V; V_{EB}=0)$ | | -0.2 | mA | | |
| I _{CEO} TIP32/32A TIP32B/C | Collector cut-off current $(-V_{CE}=30V; V_{EB}=0)$ $(-V_{CE}=60V; V_{EB}=0)$ | | -0.3 | mA | | |
| I _{EBO} | Emitter cut-off current (-V _{EB} =5V; I _C =0) | | -1.0 | mA | | |
| Hfe | DC current gain $(I_C=-1A ; V_{CE}=-4V)$ $(I_C=-3A ; V_{CE}=-4V)$ | 25 10 | 50 | | | |
| f _T | Transition frequency (I_{C} =-0.5A; V_{CE} =-10V) | 3 MHZ | | MHZ | | |

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

Silicon PNP **Power Transistors**



| | | DIME | NSIONS | | |
|-----|--------|------|--------|-------|------|
| | INCHES | | MM | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| Α | .560 | .625 | 14.22 | 15.88 | |
| В | .380 | .420 | 9.65 | 10.67 | |
| С | .140 | .190 | 3.56 | 4.82 | |
| D | .020 | .045 | 0.51 | 1.14 | |
| F | .139 | .161 | 3.53 | 4.09 | Ø |
| G | .190 | .110 | 2.29 | 2.79 | |
| Н | | .250 | | 6.35 | |
| J | .012 | .025 | 0.30 | 0.64 | |
| K | .500 | .580 | 12.70 | 14.73 | |
| L | .045 | .060 | 1.14 | 1.52 | |
| N | .190 | .210 | 4.83 | 5.33 | |
| Q | .100 | .135 | 2.54 | 3.43 | |
| R | .080 | .115 | 2.04 | 2.92 | |
| S | .045 | .055 | 1.14 | 1.39 | |
| T | .230 | .270 | 5.84 | 6.86 | |
| U | | .050 | | 1.27 | |
| V | .045 | | 1.15 | | |



Ordering Information:

| Device | Packing |
|----------------|-----------------|
| Part Number-BP | Bulk; 1Kpcs/Box |

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