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TIP122

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Darlington configuration in Jedec TO-220 package
- The complementary PNP types are the TIP127 respectively.
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1

Maximum Ratings

| Symbol | Rating | Rating | Unit |
|------------------|----------------------------------|--------|------|
| V_{CEO} | Collector-Emitter Voltage | 100 | V |
| V_{CBO} | Collector-Base Voltage | 100 | V |
| V_{EBO} | Emitter-Base Voltage | 5.0 | V |
| l _{CP} | Peak Collector Current | 8.0 | Α |
| l _c | Collector Current | 5.0 | Α |
| Pc | Collector power dissipation | 65 | W |
| TJ | Junction Temperature -55 to +150 | | °C |
| T _{STG} | Storage Temperature -55 to +150 | | °C |

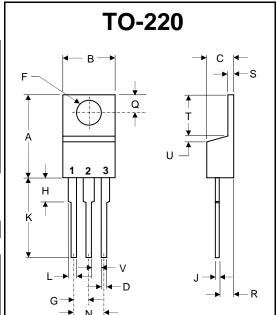
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Units |
|------------------|---|-----|-----|-------|
| OFF CHARA | CTERISTICS | | | |
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage 100 (I c=30mAdc, b=0) | | | |
| Ісво | Collector-Base Cutoff Current (V _{CB} =100Vdc,I _E =0) | | 0.2 | mAdc |
| I _{EBO} | Emitter-Base Cutoff Current $(V_{EB}=5.0Vdc, \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$ | | 2.0 | mAdc |
| ICEO | Collector-Emitter Cutoff Current $(V_{CE}=50Vdc, I_{B}=0)$ | | 0.5 | mAdc |
| ON CHARAC | CTERISTICS | | | |

| 0.10.0.0.0.0 | TENIOTIOS | | | |
|------------------------|---|------|------|-----|
| h _{FE-1} | Forward Current Transfer Ratio | 1000 | | |
| | (I _C =0.5Adc, V _{CE} =3.0Vdc) | | | |
| h _{FE-2} | Forward Current Transfer Ratio | 1000 | 1000 | |
| | (I _C =3.0Adc, V _{CE} =3.0Vdc) | | | |
| V _{CE(sat)-1} | Collector-Emitter Saturation Voltage | | 2.0 | Vdc |
| | (I _C =3.0Adc, _B =12mAdc) | | | |
| V _{CE(sat)-2} | Collector-Emitter Saturation Voltage | | 4.0 | Vdc |
| | (I _C =5.0Adc, _B =20mAdc) | | | |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | | 2.5 | Vdc |
| (***) | (I _C =3.0Adc, V _{CE} =3.0Adc) | | | |

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

NPN Silicon Transistors



| DIMENSIONS | | | | | |
|------------|------|--------|-------|-------|------|
| | INC | 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 | |
| Т | .230 | .270 | 5.84 | 6.86 | |
| U | | .050 | | 1.27 | |
| V | .045 | | 1.15 | | |



Micro Commercial Components

Ordering Information:

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

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