



Micro Commercial Components



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PZTA42

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- High Voltage Driver Application
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"
- Marking: ZTA42

Maximum Ratings

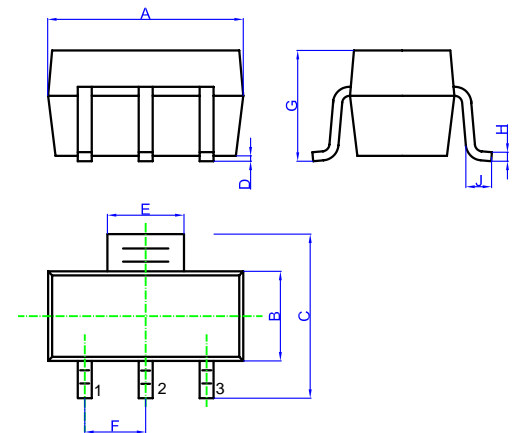
| Symbol | Rating | Value | Unit |
|------------------|-----------------------------|-------------|------|
| V _{CEO} | Collector-Emitter Voltage | 300 | V |
| V _{CBO} | Collector-Base Voltage | 300 | V |
| V _{EBO} | Emitter-Base Voltage | 6.0 | V |
| I _C | Collector Current DC | 0.2 | A |
| I _{CM} | Collector Current -Pulsed | 0.5 | A |
| P _C | Collector Power Dissipation | 1.0 | W |
| T _J | Junction Temperature | 150 | °C |
| T _{STG} | Storage Temperature | -55 to +150 | °C |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Typ | Max | Units |
|--------------------------------|---|-----|-----|-----|-------|
| OFF CHARACTERISTICS | | | | | |
| V _{CBO} | Collector-Base Voltage (I _C =100µAdc, I _E =0) | 300 | --- | --- | Vdc |
| V _{CEO} | Collector-Emitter Voltage (I _C =1mAdc, I _B =0) | 300 | --- | --- | Vdc |
| V _{EBO} | Emitter-Base Voltage (I _E =100µAdc, I _C =0) | 6.0 | --- | --- | Vdc |
| I _{CBO} | Collector Cutoff Current (V _{CB} =400Vdc, I _E =0) | --- | --- | 100 | nAdc |
| I _{EBO} | Emitter Cutoff Current (V _{EB} =4.0Vdc, I _C =0) | --- | --- | 100 | nAdc |
| h _{FE(1)} | DC Current Gain (V _{CE} =10Vdc, I _C =1mAdc) | 25 | --- | --- | --- |
| h _{FE(2)} | DC Current Gain (V _{CE} =10Vdc, I _C =10mAdc) | 40 | --- | --- | --- |
| h _{FE(3)} | DC Current Gain (V _{CE} =10Vdc, I _C =30mAdc) | 40 | --- | --- | --- |
| V _{CE(sat)} | Collector-Emitter (I _C =20mA, I _B =2mA) | --- | --- | 0.5 | Vdc |
| V _{BE(sat)} | Base-Emitter Voltage (I _C =20mA, I _B =2mA) | --- | --- | 0.9 | Vdc |
| f _T | Transition Frequency (V _{CE} =20Vdc, I _C =10mAdc, ff=100MHz) | 50 | --- | --- | MHz |
| C _{ob} C _e | Collector output capacitance (V _{CB} =20Vdc, I _E =0, f=1MHz) | --- | --- | 3 | pF |

NPN Plastic-Encapsulate Transistors

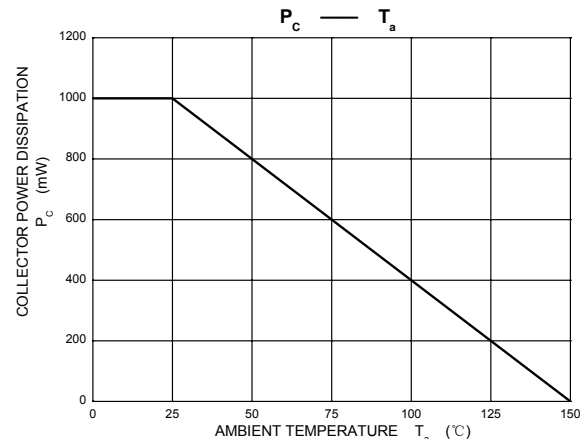
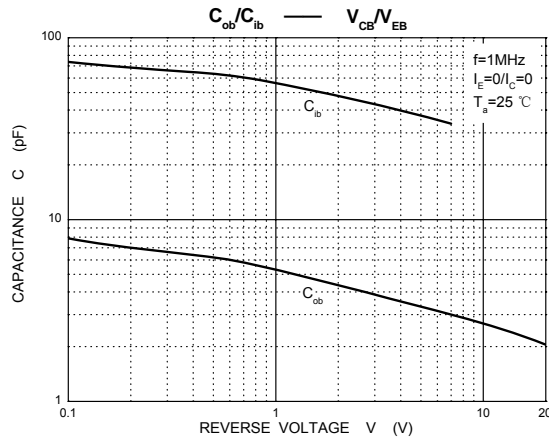
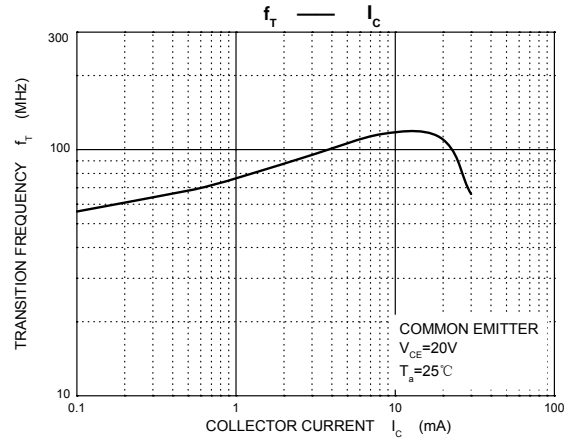
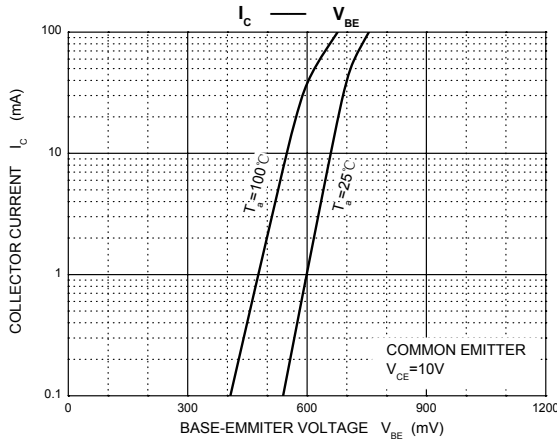
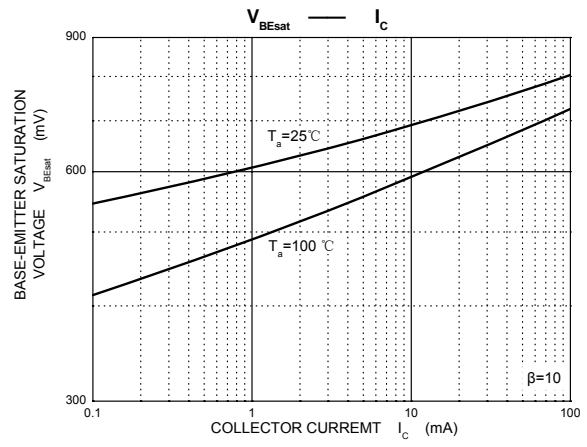
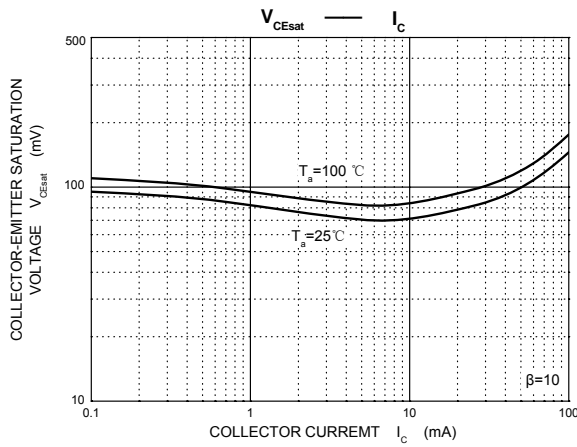
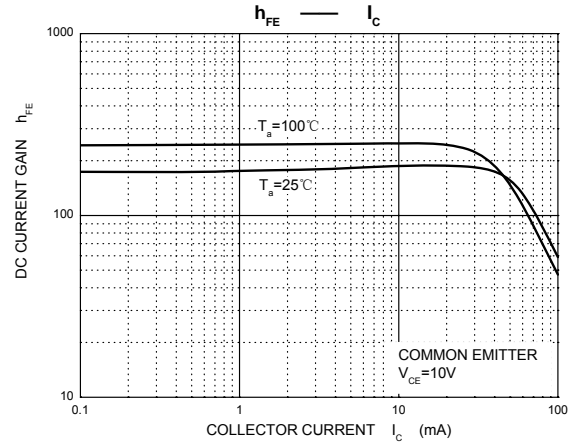
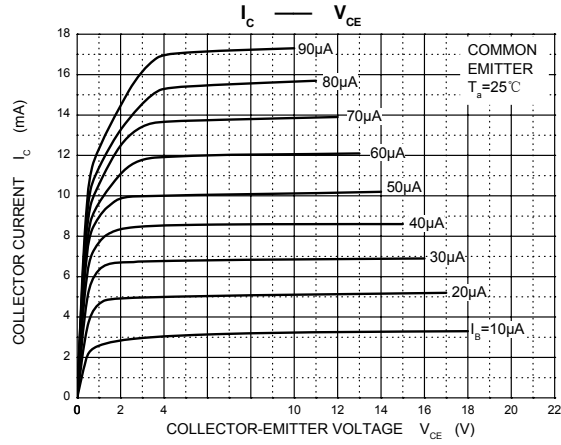
SOT-223



1. BASE
2. COLLECTOR
3. EMITTER

| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .248 | .264 | 6.30 | 6.70 | |
| B | .130 | .146 | 3.30 | 3.70 | |
| C | .264 | .287 | 6.70 | 7.30 | |
| D | .001 | .004 | 0.02 | 0.10 | |
| E | .114 | .122 | 2.90 | 3.10 | |
| F | .091 | | 2.30 | | |
| G | --- | .071 | --- | 1.80 | |
| H | .009 | .014 | 0.23 | 0.35 | |
| J | .030 | --- | 0.75 | --- | |

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Ordering Information :

| Device | Packing |
|----------------|-------------------------|
| Part Number-TP | Tape&Reel; 2.5Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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