

**SOT-223 Plastic-Encapsulate Transistors****CZT32C** TRANSISTOR (PNP)

SOT-223



1. BASE
2. COLLECTOR
3. EMITTER

FEATURES

- Complementary to CZT31C
- Power amplifier applications up to 3.0 amps.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

| Symbol | Parameter | Value | Units |
|------------------|-------------------------------|---------|-------|
| V _{CB0} | Collector-Base Voltage | -100 | V |
| V _{CEO} | Collector-Emitter Voltage | -100 | V |
| V _{EBO} | Emitter-Base Voltage | -5 | V |
| I _C | Collector Current -Continuous | -3 | A |
| P _C | Collector Power Dissipation | 1 | W |
| T _j | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -65-150 | °C |

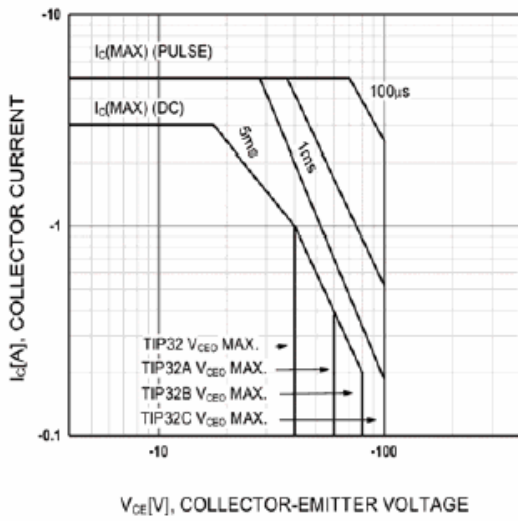
ELECTRICAL CHARACTERISTICS(T_{amb}=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|------------------------|---|------|-----|------|------|
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C =-1mA, I _E =0 | -100 | | | V |
| Collector-emitter breakdown voltage | V _{(BR)CEO} | I _C =-30mA, I _B =0 | -100 | | | V |
| Emitter-base breakdown voltage | V _{(BR)EBO} | I _E =-3mA, I _C =0 | -5 | | | V |
| Collector cut-off current | I _{CBO} | V _{CB} =-100V, I _E =0 | | | -200 | uA |
| Base cut-off current | I _{CEO} | V _{CE} =-60V, I _B =0 | | | -300 | uA |
| Emitter cut-off current | I _{EBO} | V _{EB} =-5V, I _C =0 | | | -1 | mA |
| DC current gain | h _{FE(1)} * | V _{CE} =-4V, I _C =-1A | 25 | | | |
| | h _{FE(2)} * | V _{CE} =-4V, I _C =-3A | 10 | | 100 | |
| Collector-emitter saturation voltage | V _{CE(sat)} * | I _C =-3.0A, I _B =-375mA | | | -1.2 | V |
| Base-emitter voltage | V _{BE(on)} * | V _{CE} =-4V, I _C =-3A | | | -1.8 | V |
| Transition frequency | f _T | V _{CE} =-10V, I _C =-500mA, f=1MHz | 3 | | | MHz |

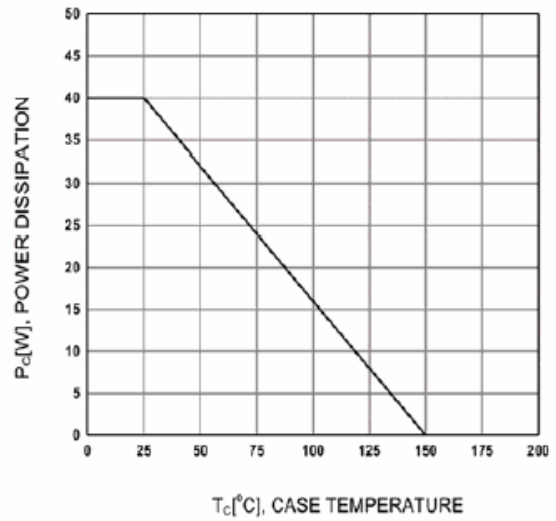
* Pulsed , 2%D.C.

Typical Characteristics

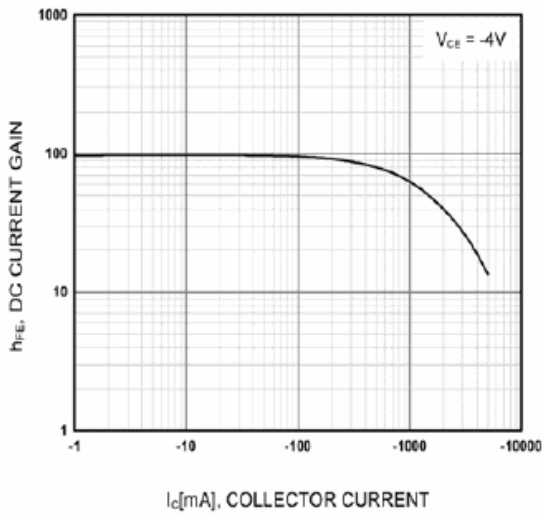
CZT32C



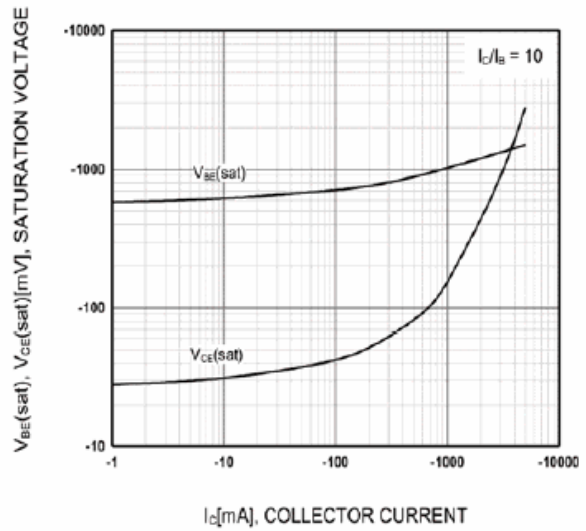
Safe Operating Area



Power Derating



DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage