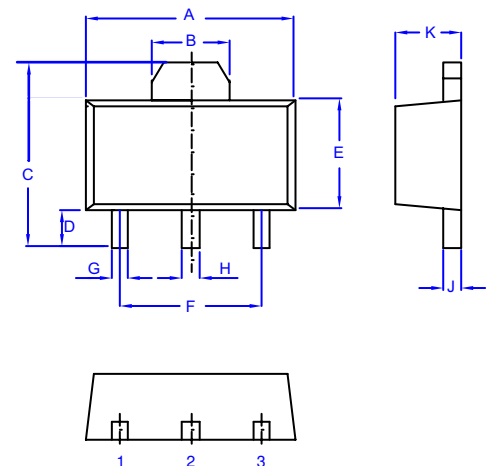




PXT8050-C
PXT8050-D
PXT8050-D3

NPN Silicon
Plastic-Encapsulate
Transistor

SOT-89



1.BASE
2.COLLECTOR
3.EMITTER

| DIM | DIMENSINS | | | | NOTES |
|-----|-----------|-------|------|-------|-------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .173 | .181 | 4.39 | 4.60 | |
| B | .061 | ----- | 1.55 | ----- | REF |
| C | .154 | .165 | 3.91 | 4.25 | |
| D | .031 | .039 | 0.80 | 1.00 | |
| E | .092 | .100 | 2.34 | 2.54 | |
| F | .118 | ----- | 3.00 | ----- | TYP |
| G | .013 | .019 | 0.33 | 0.48 | |
| H | .015 | .021 | 0.38 | 0.53 | |
| J | .015 | .016 | 0.38 | 0.41 | |
| K | .055 | .063 | 1.40 | 1.60 | |

Features

- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking:Y1
- Capable of 0.5Watts(Tamb=25°C) of Power Dissipation.
- Collector-current 1.5A
- Collector-base Voltage 40V
- Operating and storage junction temperature range: -55°C to +150°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

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

OFF CHARACTERISTICS

| | | | | |
|---------------|---|-----|-----|---------|
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage ($I_C=100\mu A, I_E=0$) | 40 | --- | Vdc |
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage ($I_C=0.1mA, I_B=0$) | 25 | --- | Vdc |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage ($I_E=100\mu A, I_C=0$) | 5.0 | --- | Vdc |
| I_{CBO} | Collector Cutoff Current ($V_{CB}=40Vdc, I_E=0$) | --- | 0.1 | μA |
| I_{CEO} | Collector Cutoff Current ($V_{CE}=20Vdc, I_B=0$) | --- | 0.1 | μA |
| I_{EBO} | Emitter Cutoff Current ($V_{EB}=5.0Vdc, I_C=0$) | --- | 0.1 | μA |

ON CHARACTERISTICS

| | | | | |
|---------------|---|-----|------|-----|
| $h_{FE(1)}$ | DC Current Gain ($I_C=100mA, V_{CE}=1.0Vdc$) | 120 | 400 | --- |
| $h_{FE(2)}$ | DC Current Gain ($I_C=800mA, V_{CE}=1.0Vdc$) | 40 | --- | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C=800mA, I_B=80mA$) | --- | 0.5 | Vdc |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage ($I_C=800mA, I_B=80mA$) | --- | 1.2 | Vdc |
| V_{BEF} | Base- Emitter Positive Favor Voltage ($I_B=1.0A$) | --- | 1.55 | Vdc |

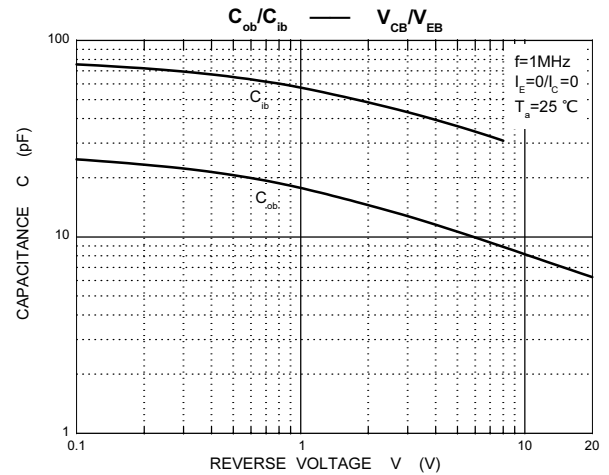
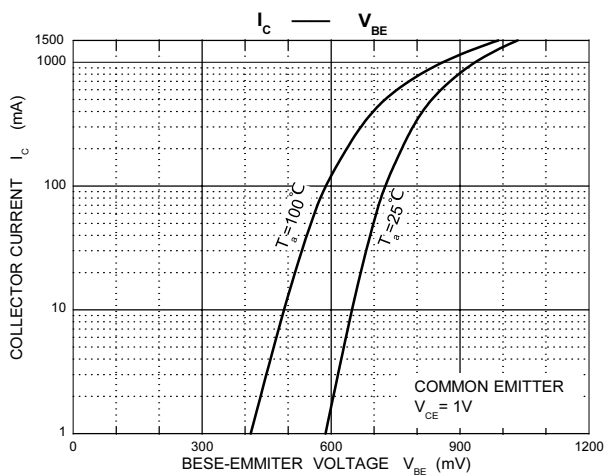
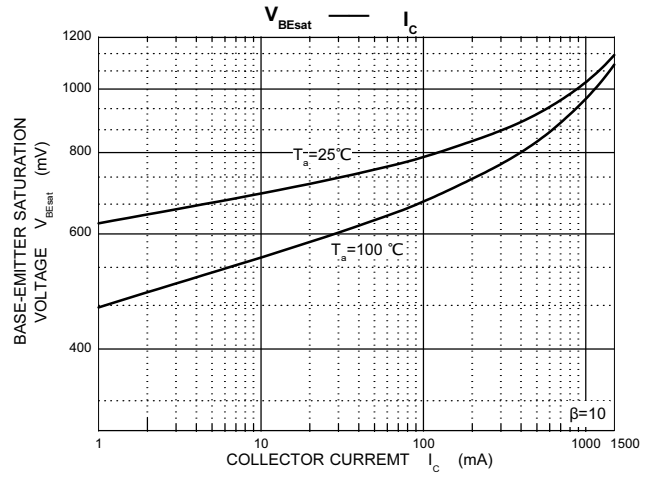
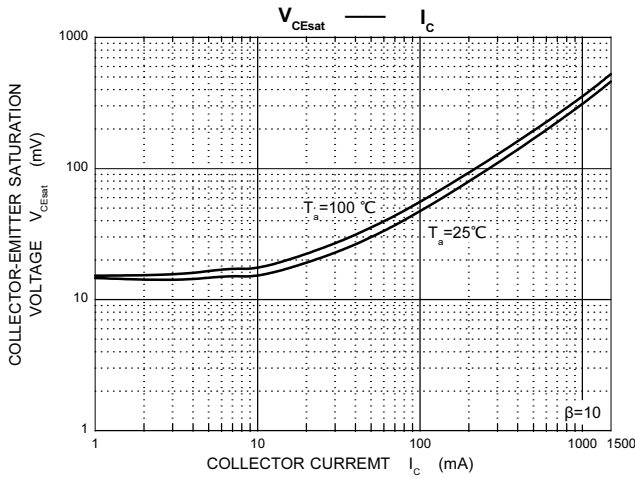
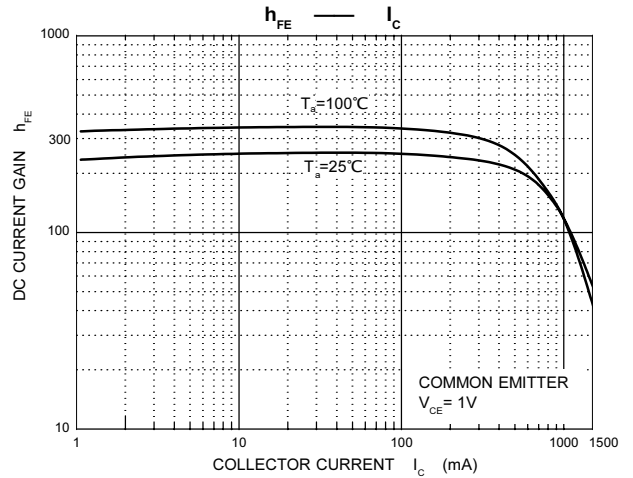
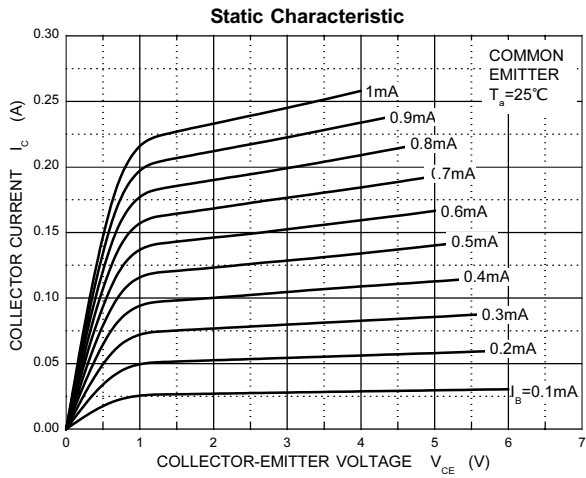
SMALL-SIGNAL CHARACTERISTICS

| | | | | |
|----------|---|-----|-----|-----|
| f_T | Transistor Frequency ($I_C=50mA, V_{CE}=10Vdc$) | 100 | --- | MHz |
| C_{cb} | Output Capacitance ($I_E=0, V_{CB}=10Vdc, f=1MHz$) | --- | 15 | pF |

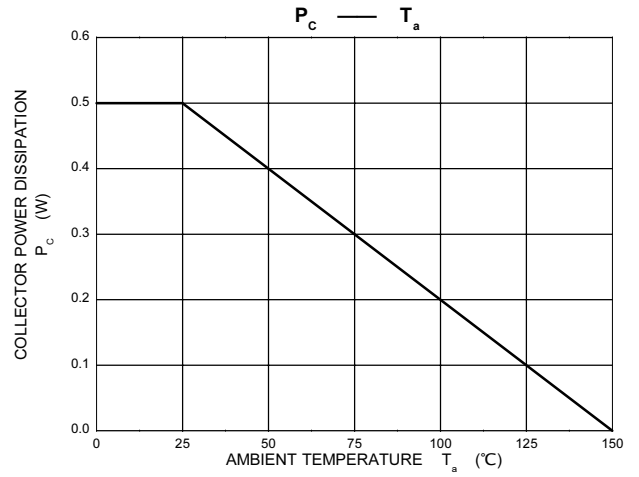
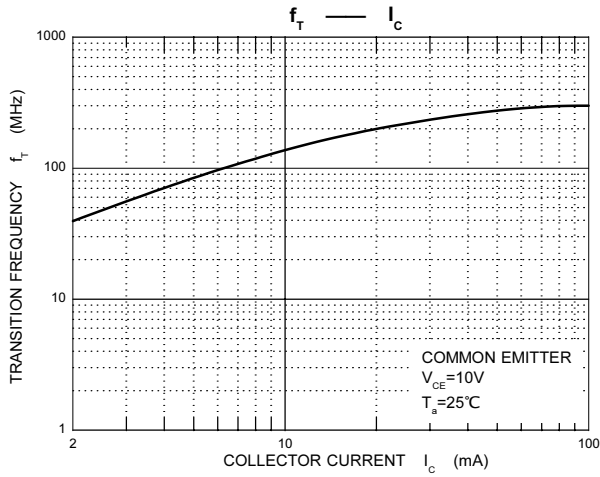
CLASSIFICATION OF $h_{FE(1)}$

| Rank | C | D | D3 |
|-------|---------|---------|---------|
| Range | 120-200 | 160-300 | 300-400 |

Typical Characteristics



Typical Characteristics





Micro Commercial Components

Ordering Information :

| Device | Packing |
|----------------|------------------------|
| Part Number-TP | Tape&Reel: 1 Kpcs/Reel |

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

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