

Electrical Characteristics @25°C unless otherwise specified

| Characteristic | Symbol | Min | Max | Unit | Test Condition |
|--|--------------------------------------|-----|-----|------|--|
| DC Current Gain | Current Gain Group -16 -25 -40 | 100 | 250 | — | $V_{CE} = 1.0V, I_C = 100mA$ |
| | | 160 | 400 | | $V_{CE} = 1.0V, I_C = 300mA$ |
| | Current Gain Group -16 -25 -40 | 250 | 600 | — | |
| | | 60 | — | | |
| | | 100 | — | | |
| | | 170 | — | | |
| Thermal Resistance, Junction to Substrate Backside | $R_{\theta SB}$ | — | 323 | °C/W | |
| Thermal Resistance, Junction to Ambient Air | $R_{\theta JA}$ | — | 403 | °C/W | |
| Collector-Emitter Saturation Voltage | $V_{CE(SAT)}$ | — | 0.7 | V | $I_C = 500mA, I_B = 50mA$ |
| Base-Emitter Voltage | V_{BE} | — | 1.2 | V | $V_{CE} = 1.0V, I_C = 300mA$ |
| Collector-Emitter Cutoff Current | I_{CES} | — | 100 | nA | $V_{CE} = 45V$ |
| | | — | 5.0 | μA | $V_{CE} = 25V, T_J = 150°C$ |
| Emitter-Base Cutoff Current | I_{EBO} | — | 100 | nA | $V_{EB} = 4.0V$ |
| Gain Bandwidth Product | f_T | 100 | — | MHz | $V_{CE} = 5.0V, I_C = 10mA, f = 50MHz$ |
| Collector-Base Capacitance | C_{CBO} | — | 12 | pF | $V_{CB} = 10V, f = 1.0MHz$ |

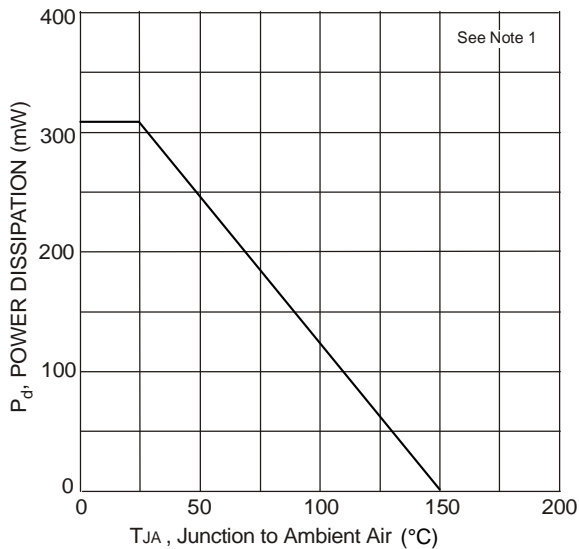


Fig. 1, Power Derating Curve

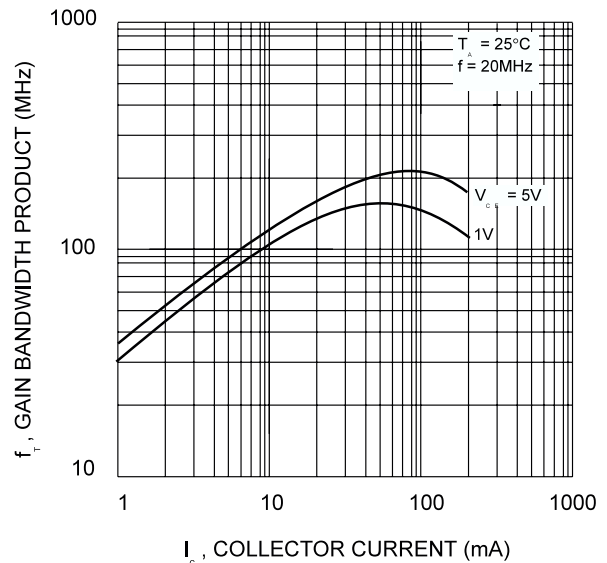


Fig. 2, Gain-Bandwidth Product vs Collector Current

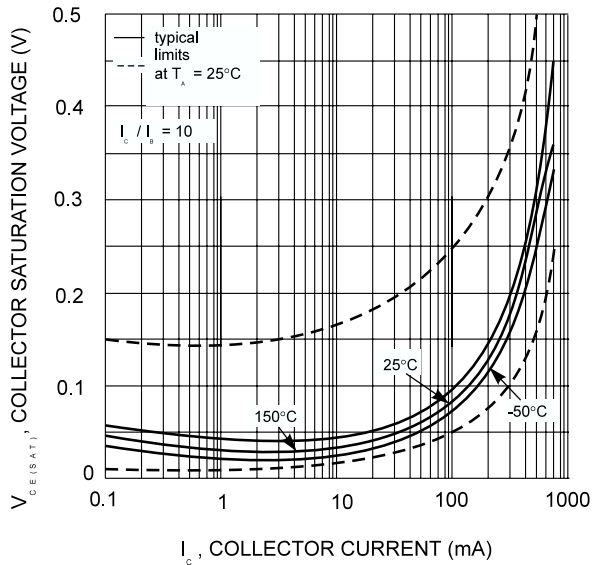


Fig. 3, Collector Sat. Voltage vs Collector Current

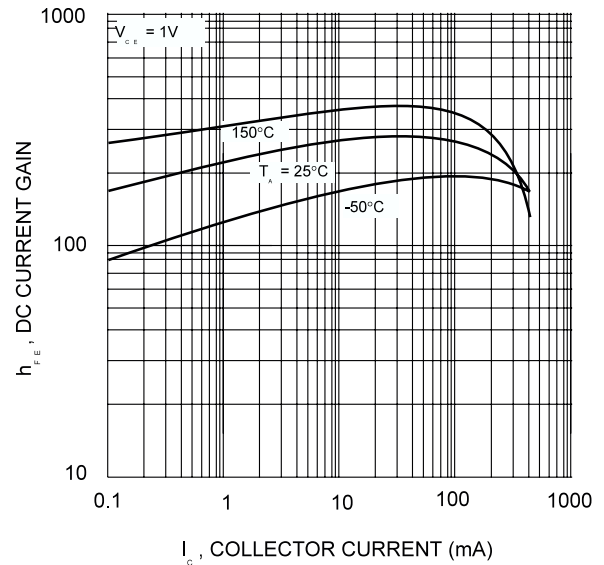


Fig. 4, DC Current Gain vs Collector Current

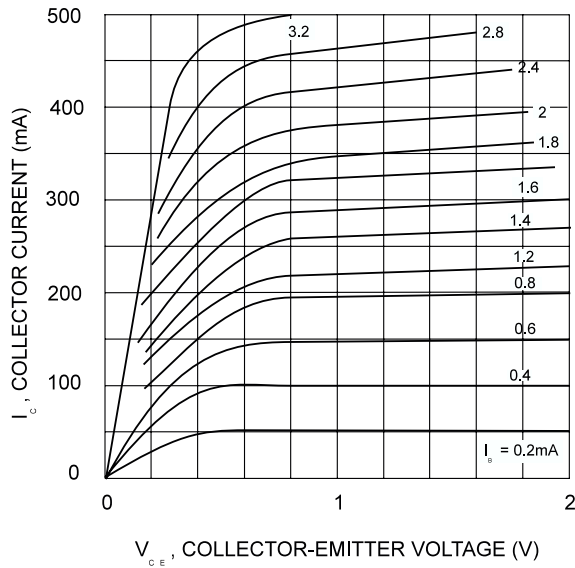


Fig. 5, Typical Emitter-Collector Characteristics

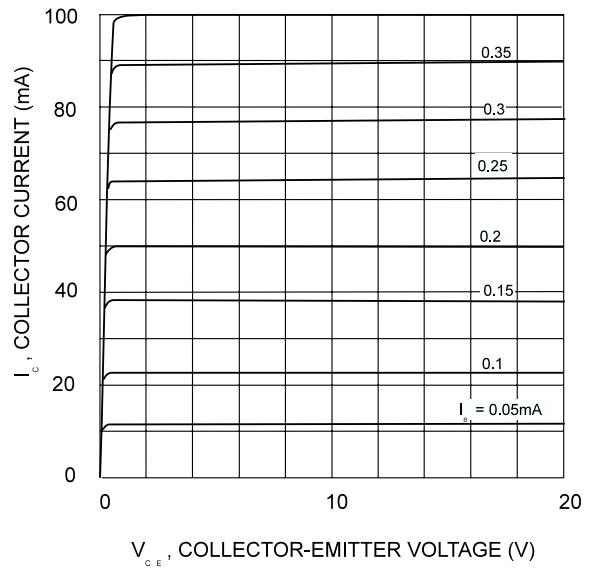


Fig. 6, Typical Emitter-Collector Characteristics



Micro Commercial Components

Ordering Information :

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel; 3Kpcs/Reel |

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

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