# Elektronika 315
# National Semiconductor – data sheets for Process 19
# (2N2222A BJT NPN transistor)

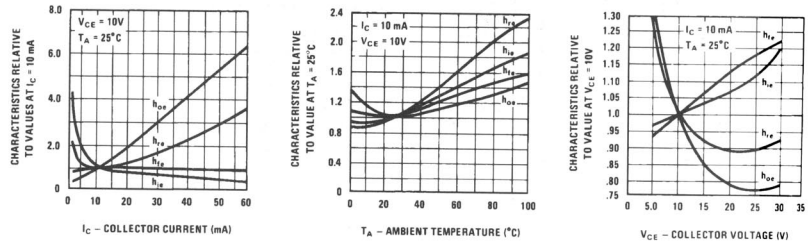


## Process 19

**SMALL SIGNAL CHARACTERISTICS** (f = 1.0 kHz)

| Symbol | Parameter | Conditions | Typ | Units |
|---|---|---|---|---|
| $h_{ie}$ | Input Resistance | $I_C$ = 10 mA, $V_{CE}$ = 10V | 700 | Ω |
| $h_{oe}$ | Output Conductance | $I_C$ = 10 mA, $V_{CE}$ = 10V | 120 | μmhos |
| $h_{fe}$ | Small Signal Current Gain | $I_C$ = 10 mA, $V_{CE}$ = 10V | 240 | |
| $h_{re}$ | Voltage Feedback Ratio | $I_C$ = 10 mA, $V_{CE}$ = 10V | 460 | $\times 10^{-6}$ |

**TYPICAL COMMON EMITTER CHARACTERISTICS** (f = 1.0 kHz)

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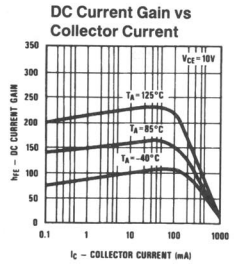


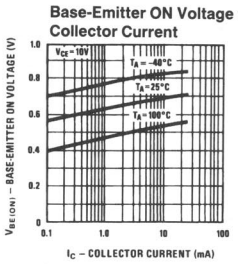


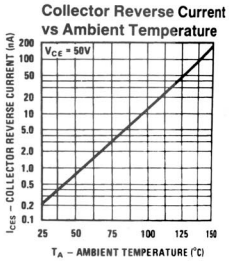


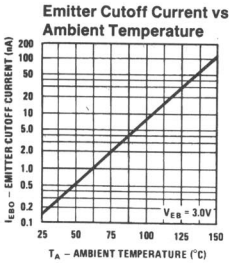


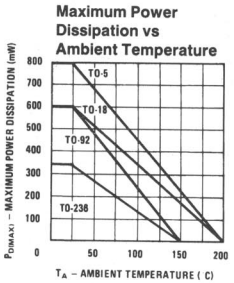


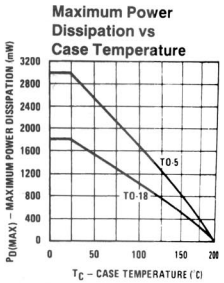


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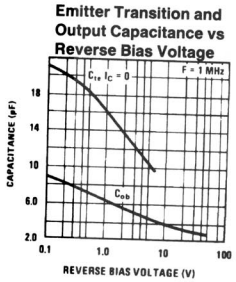
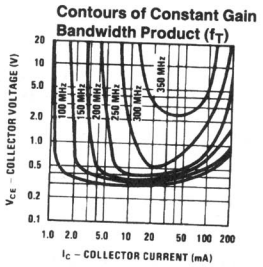
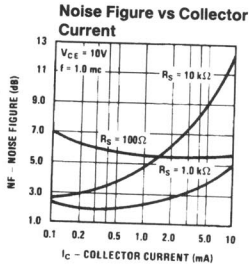
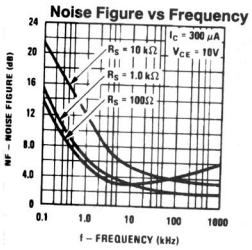
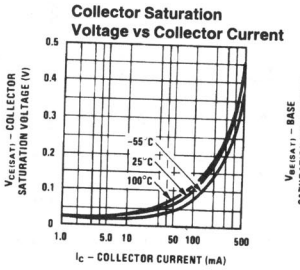
## Process 19

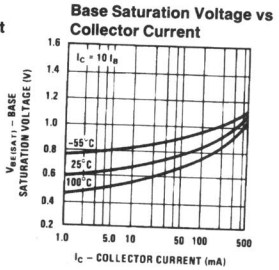


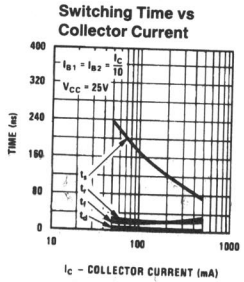



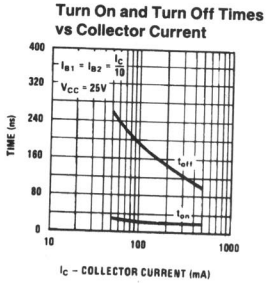

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