

| BASIC CHARACTERISTICS (1) | | | | | | | |
|----------------------------------|--|------|-----------|------|------|------|---------------|
| PARAMETER | TEST CONDITION | PART | SYMBOL | MIN. | TYP. | MAX. | UNIT |
| INPUT (EMITTER) | | | | | | | |
| Forward voltage | $I_F = 60 \text{ mA}$ | | V_F | | 1.25 | 1.6 | V |
| Junction capacitance | $V_R = 0 \text{ V}, f = 1 \text{ MHz}$ | | C_j | | 50 | | pF |
| OUTPUT (DETECTOR) | | | | | | | |
| Collector emitter voltage | $I_C = 1 \text{ mA}$ | | V_{CEO} | 70 | | | V |
| Emitter collector voltage | $I_E = 10 \text{ }\mu\text{A}$ | | V_{ECO} | 7 | | | V |
| Collector dark current | $V_{CE} = 25 \text{ V}, I_F = 0 \text{ A}, E = 0 \text{ lx}$ | | I_{CEO} | | | 100 | nA |
| SWITCHING CHARACTERISTICS | | | | | | | |
| Turn-on time | $I_C = 2 \text{ mA}, V_S = 5 \text{ V}, R_L = 100 \text{ }\Omega$ (see figure 2) | | t_{on} | | 10 | | μs |
| Turn-off time | $I_C = 2 \text{ mA}, V_S = 5 \text{ V}, R_L = 100 \text{ }\Omega$ (see figure 2) | | t_{off} | | 8 | | μs |

Note

(1) $T_{amb} = 25 \text{ }^\circ\text{C}$, unless otherwise specified

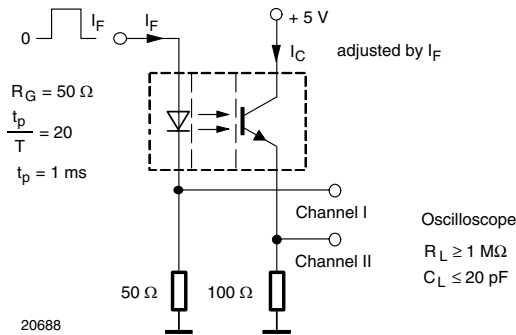


Fig. 2 - Test Circuit for t_{on} and t_{off}

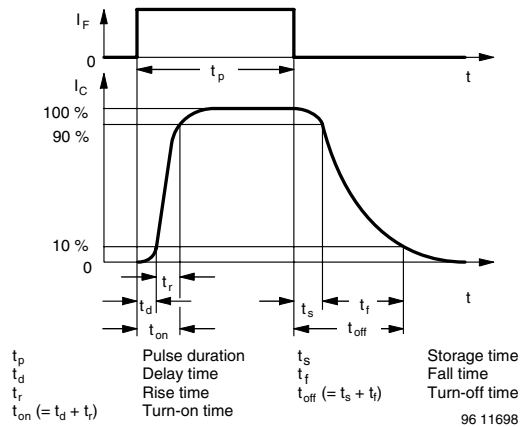


Fig. 3 - Switching Times

BASIC CHARACTERISTICS

$T_{amb} = 25 \text{ }^\circ\text{C}$, unless otherwise specified

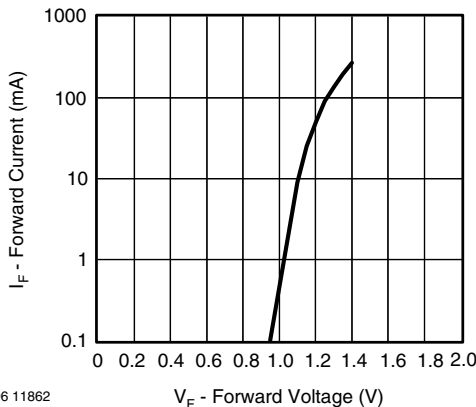


Fig. 4 - Forward Current vs. Forward Voltage

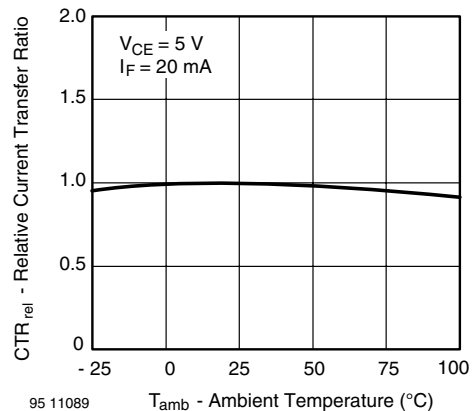


Fig. 5 - Relative Current Transfer Ratio vs. Ambient Temperature

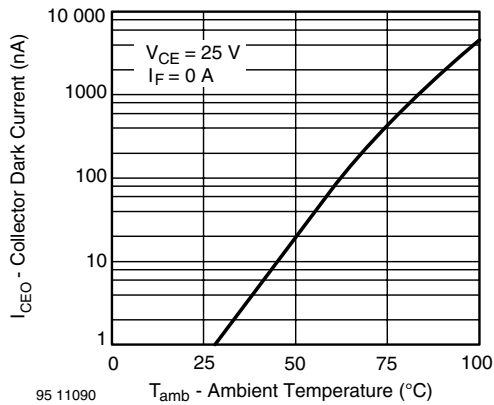


Fig. 6 - Collector Dark Current vs. Ambient Temperature

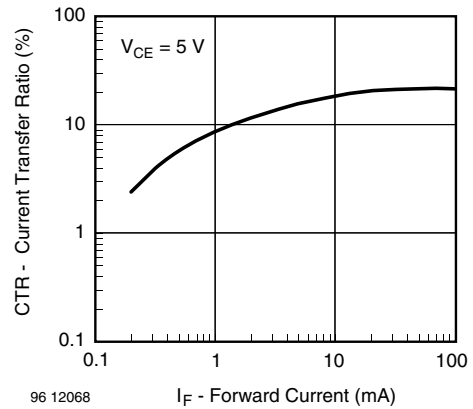


Fig. 9 - Current Transfer Ratio vs. Forward Current

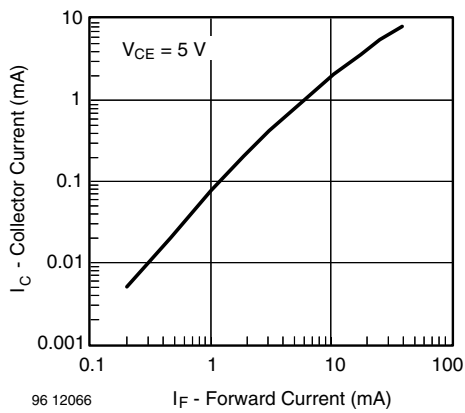


Fig. 7 - Collector Current vs. Forward Current

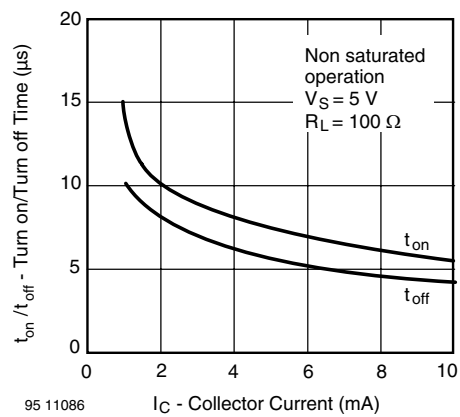


Fig. 10 - Turn-off/Turn-on Time vs. Collector Current

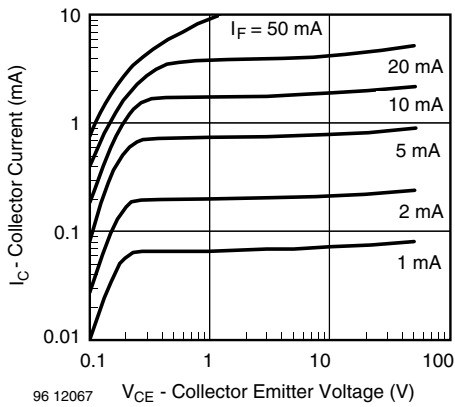


Fig. 8 - Collector Current vs. Collector Emitter Voltage

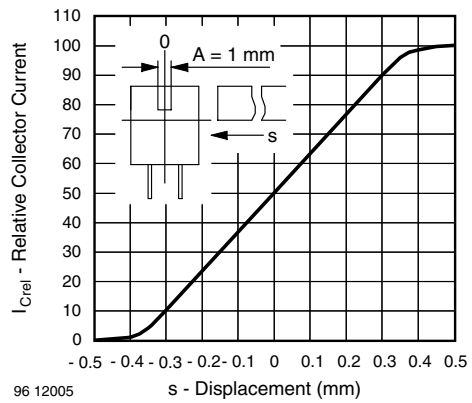


Fig. 11 - Relative Collector Current vs. Displacement