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NTE2647 (PNP) & NTE2648 (NPN)
Silicon Complementary Transistors
General Purpose Amp
TO-220 Full Pack Type Package

Features:

- High Transition Frequency

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

| | | |
|---------------------------------------|-------|----------------|
| Collector-Base Voltage, V_{CBO} | | 230V |
| Collector-Emitter Voltage, V_{CEO} | | 230V |
| Emitter-Base Voltage, V_{EBO} | | 5V |
| Collector Current, I_C | | 1A |
| Collector Power Dissipation, P_C | | |
| $T_A = +25^\circ\text{C}$ | | 2.0W |
| $T_C = +25^\circ\text{C}$ | | 20W |
| Operating Junction Temperature, T_J | | +150°C |
| Storage Temperature Range, T_{stg} | | -55° to +150°C |

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|----------------------|---|-----|-----|-----|---------------|
| Collector Cutoff Current | I_{CBO} | $V_{CB} = 230\text{V}$, $I_E = 0$ | - | - | 1.0 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = \text{V}$, $I_C = 0$ | - | - | 1.0 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = 10\text{mA}$, $I_B = 0$ | 230 | - | - | V |
| DC Current Gain | h_{FE} | $V_{CE} = 5\text{V}$, $I_C = 100\text{mA}$ | 100 | - | 320 | |
| Collector-Emitter Saturation Voltage | $V_{CE(\text{sat})}$ | $I_C = 500\text{mA}$, $I_B = 50\text{mA}$ | - | - | 1.5 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE} = 5\text{V}$, $I_C = 500\text{mA}$ | - | - | 1.0 | V |
| Transition Frequency NTE2747 | f_T | $V_{CE} = 10\text{V}$, $I_C = 100\text{mA}$ | - | 70 | - | MHz |
| NTE2748 | | | - | 100 | - | MHz |
| Collector Output Capacitance NTE2647 | C_{ob} | $V_{CB} = 10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$ | - | 30 | - | pF |
| NTE2748 | | | - | 20 | - | pF |

