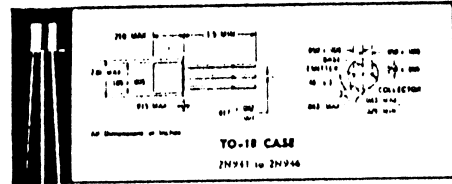
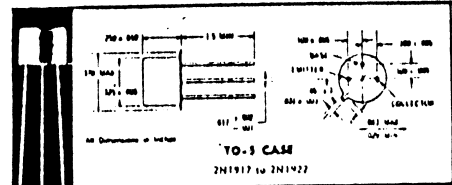


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|--|--|
| <h2 style="margin: 0;">SWITCHING</h2> <h3 style="margin: 0;">SILICON EPITAXIAL JUNCTION</h3> <h3 style="margin: 0;">PNP TRANSISTORS</h3> | 2N941 — 2N1917 2N942 — 2N1918 2N943 — 2N1919 2N944 — 2N1920 2N945 — 2N1921 2N946 — 2N1922 |
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- LOW AND HIGH LEVEL CHOPPING
- LOW JUNCTION CAPACITANCE



ELECTRICAL DATA ABSOLUTE MAXIMUM RATING

| PARAMETER | SYMBOL | 2N941/942 2N1917/1918 | 2N943/944 2N1919/1920 | 2N945 2N1921 | 2N946 2N1922 | UNITS |
|--------------------------------------|------------|--------------------------|--------------------------|-----------------|-----------------|-------|
| Collector to Emitter Voltage | BV_{CEO} | -8 | -18 | -50 | -80 | V |
| Collector to Base Voltage | BV_{CBO} | -25 | -40 | -50 | -80 | V |
| Emitter to Base Voltage | BV_{EBO} | -25 | -40 | -50 | -80 | V |
| Collector Current | I_C | 50mA | | | | |
| Power Dissipation (free air) | P_D | 250mW | | | | |
| Junction Temp. (Oper. & Store) | T_J | -65°C to +175°C | | | | |
| Lead Temp. (1/16" x 1/32" From Case) | T_L | 240°C for 10 sec. | | | | |
| Derating Factor (free air) | D_r | 1.6mW/°C | | | | |

ELECTRICAL CHARACTERISTICS: $T_A = 25^\circ\text{C}$ (UNLESS OTHERWISE STATED)

| PARAMETER | SYMBOL | Case: TO-18 Case: TO-5 | 2N941 2N1917 | | 2N942 2N1918 | | 2N943 2N1919 | | 2N944 2N1920 | | 2N945 2N1921 | | 2N946 2N1922 | | UNITS |
|---|---------------|---|-----------------|------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|-----------------|------|-------|
| | | | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | MIN. | MAX. | |
| Collector-Base Leakage Current | I_{CBO} | $V_{CE} = -4.5V$ $I_E = 0$ | - | 2.5 | - | 2.5 | - | - | - | - | - | - | - | - | nA |
| Collector-Base Leakage Current | I_{CBO} | $V_{CE} = -4.5V$ $I_E = 0, T_{emp}: +65^\circ\text{C}$ | - | 50 | - | 50 | - | - | - | - | - | - | - | - | nA |
| Emitter-Base Leakage Current | I_{EBO} | $V_{EB} = -4.5V$ $I_C = 0$ | - | 2.5 | - | 2.5 | - | - | - | - | - | - | - | - | nA |
| Emitter-Collector Inverse Leakage Current | I_{EC} | $V_{CE} = -10V$ $V_{EC} = -15V$ | - | - | - | - | - | 1.5 | - | 2.5 | - | 10.0 | - | 10.0 | nA |
| Emitter Offset Current | I_{E1} | $V_{CE} = -1.5V$ | - | 1.0 | - | 3.0 | - | 1.0 | - | 1.5 | - | 2.0 | - | 2.0 | nA |
| Emitter Offset Voltage | V_{E1} | $I_E = -250\mu\text{A}$ $I_C = 0$ | - | 1.0 | - | 3.0 | - | 2.0 | - | 3.0 | - | 4.0 | - | 4.0 | mV |
| Collector Saturation Voltage | $V_{CE(sat)}$ | $I_E = -500\mu\text{A}$ $I_C = -20\mu\text{A}$ | - | - | - | - | - | 3.0 | - | 4.0 | - | 5.0 | - | 5.0 | mV |
| A.C. Current Gain | h_{fe} | $V_{CE} = -6V$ $I_E = 1.0\text{mA}$ $f = 1\text{KC}$ | 25 | - | 25 | - | - | - | - | - | - | - | - | - | - |
| High Frequency Current Gain | h_{fe} | $V_{CE} = -6V$ $I_E = 1.0\text{mA}$ $f = 1\text{MC}$ | 16 | - | 16 | - | 1.0 | - | 1.0 | - | 1.0 | - | 1.0 | - | - |
| Collector to Base Capacitance | C_{ob} | $V_{CE} = -6V$ $I_E = -1.0\text{mA}$ $f = 1\text{MC}$ | - | 14 | - | 14 | - | 14 | - | 14 | - | 14 | - | 14 | pf |

