

DISCRETE PRODUCTS

T-27-23

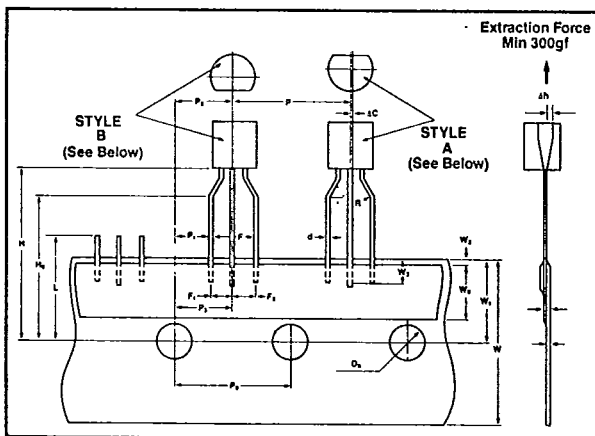
Differential Amplifiers (Continued)

Bipolar Dual Transistors — PNP

| PART NUMBER | PACKAGE | V _{BE 1-2} mV Max | ΔV _{BE} μV/°C Max | h _{FE} (Note 1) Min | I _{B1-2} (Note 1) nA Max | BV _{CEO} V Min | I _{CBO} nA Max | NF dB Max | f _t MHz @ I _C Min | C _{obo} pF Max | COMMENTS |
|-------------|----------------|----------------------------------|----------------------------------|------------------------------------|--|-------------------------------|-------------------------------|-----------------|---|-------------------------------|---------------------|
| 2N3810 | TO-78 | 3 | 10 | 100 | | -60 | 10 | 3 typ. | 100 @ 1mA | 4 | Low V _{OS} |
| 2N3810A | TO-78 | 1.5 | 5 | 100 | | -60 | 10 | 3 typ. | 100 @ 1mA | 4 | Low V _{OS} |
| 2N3811 | TO-78 | 3 | 10 | 225 | | -60 | 10 | 3 typ. | 100 @ 1mA | 4 | Low V _{OS} |
| 2N3811A | TO-78 | 1.5 | 5 | 225 | | -60 | 10 | 3 typ. | 100 @ 1mA | 4 | Low V _{OS} |
| 2N5117 | TO-78 | 3 | 3 | 100 | 10 | -45 | 0.1 | 4 typ. | 100 @ 0.5mA | 0.8 | Low V _{OS} |
| 2N5118 | TO-78 | 5 | 5 | 100 | 15 | -45 | 0.1 | 4 typ. | 100 @ 0.5mA | 0.8 | Low Cost |
| 2N5119 | TO-78 | 5 | 10 | 50 | 40 | -45 | 0.1 | 4 typ. | 100 @ 0.5mA | 0.8 | Low Cost |
| IT130 | TO-78 TO-71 | 2 | 5 | 200 | 5 | -45 | 1.0 | 2 typ. | 110 @ 1mA | 2 | Low V _{OS} |
| IT130A | TO-78 TO-71 | 1 | 3 | 200 | 2.5 | -45 | 1.0 | 2 typ. | 110 @ 1mA | 2 | Low V _{OS} |
| IT131 | TO-78 TO-71 | 3 | 10 | 80 | 25 | -45 | 1.0 | 2 typ. | 90 @ 1mA | 2 | Low Cost |
| IT132 | TO-78 TO-71 | 5 | 20 | 80 | 25 | -45 | 1.0 | 2 typ. | 90 @ 1mA | 2 | Low Cost |
| IT136 | TO-78 TO-71 | 1 | 3 | 150 | 2.5 | -60 | 0.1 | 2 typ. | 250 @ 10mA | 4 | Low V _{OS} |
| IT137 | TO-78 TO-71 | 2 | 5 | 150 | 5 | -60 | 0.1 | 2 typ. | 250 @ 10mA | 4 | Low V _{OS} |
| IT138 | TO-78 TO-71 | 3 | 10 | 100 | 10 | -55 | 0.1 | 2 typ. | 250 @ 10mA | 4 | Low V _{OS} |
| IT139 | TO-78 TO-71 | 5 | 20 | 70 | 20 | -45 | 0.1 | 2 typ. | 250 @ 10mA | 4 | Low V _{OS} |

Note:
1. I_C = 10μA, V_{CE} = 5V

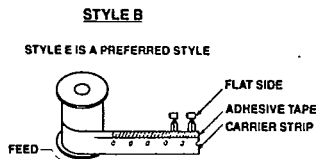
TO-92 Taping Specifications and Winding Styles



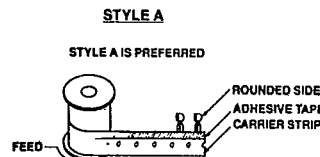
(EIA STD RS468)

| | | | |
|----------------|-------------------------------------|---------------------------------|--|
| P | 12.7 ± 0.5 | H ₀ | 16 ± 0.5 |
| P ₀ | 12.7 ± 0.2 | F | 5 ^{+0.08} _{-0.08} |
| P ₁ | 3.85 ± 0.5 | F ₁ - F ₂ | ±0.3 |
| P ₂ | 6.35 ± 0.5 | D ₀ | 4 ± 0.2 |
| P ₃ | 6.35 | t | 0.7 ± 0.2 |
| W | 8 ^{+0.10} _{-0.05} | Δ _h | 0 ± 1 |
| W ₀ | 6 ± 1 | d | 0.050 ^{+0.005} _{-0.005} dia. |
| W ₁ | 9 ± 0.5 | R | 0.8 |
| W ₂ | Max. 0.5 | α | 45°C-60°C |
| W ₃ | Min. 4.5 | L | Max. 11 |
| H | 19.5 ± 0.5 | Δ _c | 0 ± 0.5 |

All Dimensions in Millimeter



FLAT SIDE OF TRANSISTOR AND ADHESIVE TAPE VISIBLE



ROUNDED SIDE OF TRANSISTOR AND ADHESIVE TAPE VISIBLE