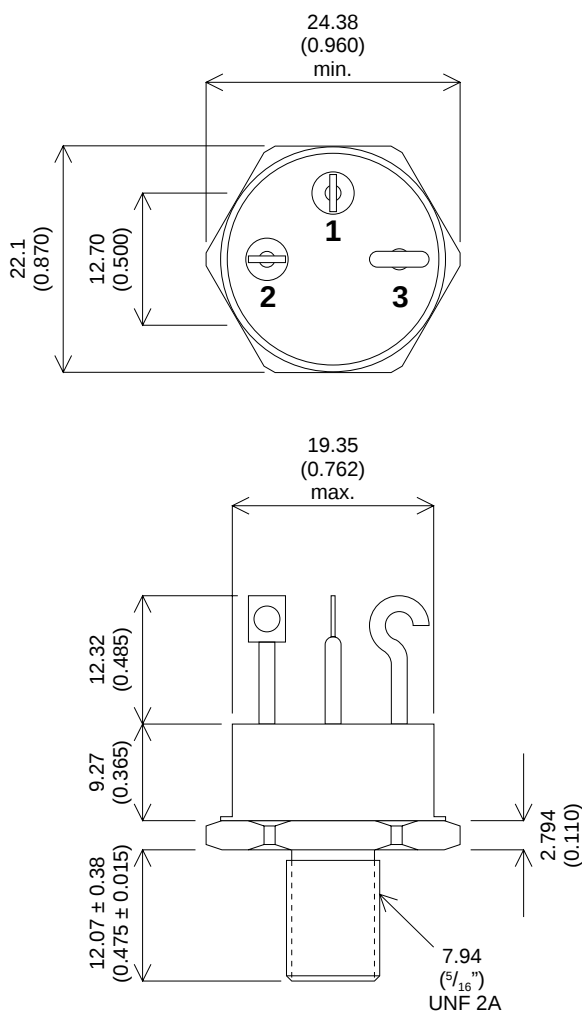


## MECHANICAL DATA

Dimensions in mm (inches)



### TO-63 Metal Package.

Pin 1 – Base      Pin 2 – Emitter      Case – Collector

## NPN DRIVER TRANSISTOR

- Bipolar Power Transistor
- TO-63 Hermetic Package
- Fast Switching

## ABSOLUTE MAXIMUM RATINGS ( $T_{case} = 25^{\circ}\text{C}$ unless otherwise stated)

|                |                                                  |                                 |
|----------------|--------------------------------------------------|---------------------------------|
| $V_{CEO}$      | Collector – Emitter Voltage                      | 80V                             |
| $I_C$          | Continuous Collector Current                     | 20A                             |
| $P_D$          | Total Device Dissipation                         | 150W                            |
|                | Derate above $100^{\circ}\text{C}$               | $0.67^{\circ}\text{C/W}$        |
| $T_{STG}, T_J$ | Storage and Operating Junction Temperature Range | $-55$ to $+200^{\circ}\text{C}$ |

| Parameter     |                                        | Test Conditions              |              | Min. | Typ. | Max. | Units   |
|---------------|----------------------------------------|------------------------------|--------------|------|------|------|---------|
| $H_{FE1}$     | Current Gain                           | $V_{CE} = 10V$               | $I_C = 1A$   | 40   |      |      | —       |
| $H_{FE2}$     | Current Gain                           | $V_{CE} = 10V$               | $I_C = 10A$  | 20   |      |      |         |
| $h_{fe}$      | Current Gain                           | $V_{CE} = 15V$<br>$f = 1MHz$ | $I_C = 2A$   | 30   |      |      | —       |
| $V_{CE(sat)}$ | Collector – Emitter Saturation Voltage | $I_C = 5A$                   | $I_B = 0.5A$ |      |      | 0.5  | V       |
|               |                                        | $I_C = 10A$                  | $I_B = 1A$   |      |      | 2    |         |
| $V_{BE(sat)}$ | Base – Emitter Saturation Voltage      | $I_C = 5A$                   | $I_B = 0.5A$ |      |      | 1    | V       |
|               |                                        | $I_C = 10A$                  | $I_B = 1A$   |      |      | 2    |         |
| $t_{on}$      | Turn-On Time                           | $I_C = 10A$                  |              |      |      | 2    | $\mu s$ |
| $t_{off}$     | Turn-Off Time                          | $I_{B1} = I_{B2} = 1A$       |              |      |      | 2    |         |