

isc Silicon NPN Power Transistor
BU208
DESCRIPTION

- High Voltage- $V_{CBO}=1500V(\text{Min.})$
- Collector Current- $I_C=5A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

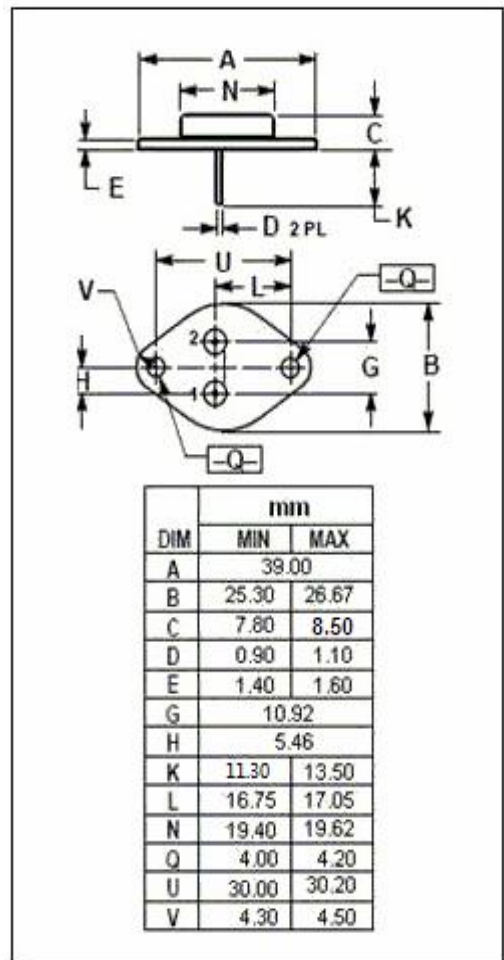
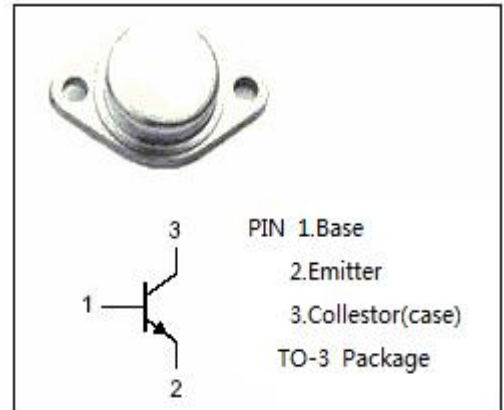
- Color TV Horizontal output applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Emitter Voltage | 1500 | V |
| V_{CEO} | Collector-Emitter Voltage | 700 | V |
| V_{EBO} | Emitter-Base Voltage | 5 | V |
| I_C | Collector Current | 5 | A |
| I_{CM} | Collector Current-Peak | 7.5 | A |
| I_{BM} | Base Current-Peak | 4 | A |
| P_C | Collector Power Dissipation @ $T_c=25^\circ\text{C}$ | 55 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature | -55~150 | $^\circ\text{C}$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|------|--------------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 2.27 | $^\circ\text{C/W}$ |



isc Silicon NPN Power Transistor**BU208****ELECTRICAL CHARACTERISTICS**T_C=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|------|------|-----|------|
| V _{CB0} | Collector-Emitter Sustaining Voltage | I _C = 1mA; I _B = 0 | 1500 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 4.5A; I _B = 2A | | | 5.0 | V |
| V _{bE(sat)} | Base-Emitter Saturation Voltage | I _C = 4.5A; I _B = 2A | | | 1.5 | V |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 5.0V; I _C = 0 | | | 100 | μA |
| I _{CB0} | Collector Cutoff Base | V _{CB} = 1300V; V _{CE} = 0 | | | 10 | μA |
| h _{FE 1} | DC Current Gain | I _C = 1A; V _{CE} = 5V | 10 | | 40 | |
| h _{FE 2} | DC Current Gain | I _C = 4.5A; V _{CE} = 5V | 2.25 | | | |

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