

Silicon NPN Power Transistor

BU606

DESCRIPTION

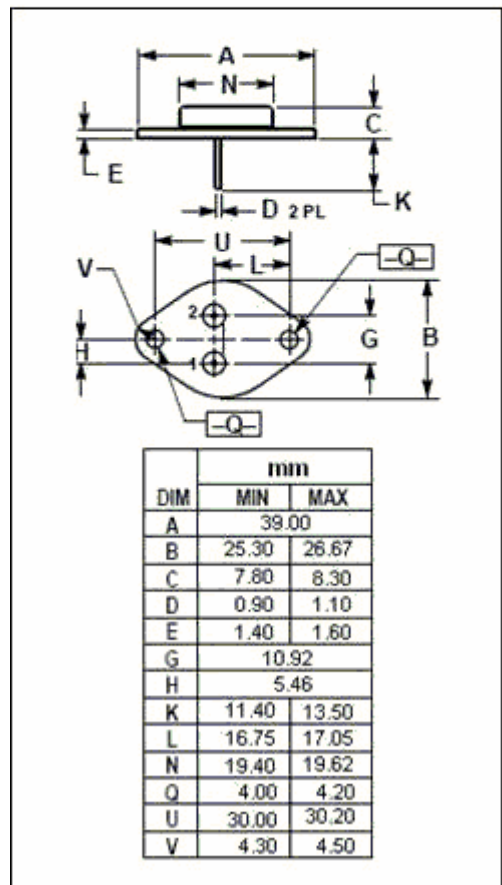
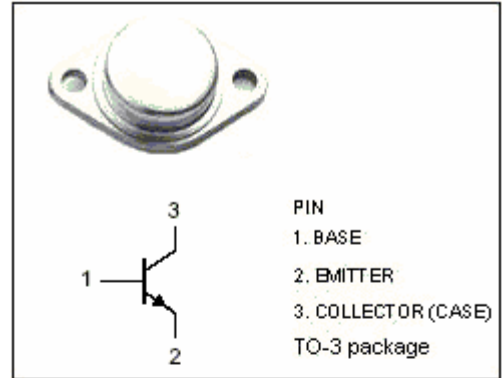
- High Voltage: $V_{CEV} = 400V(\text{Min})$
- Fast Switching Speed-
: $t_f = 0.75 \mu s(\text{Max})$
- Low Saturation Voltage-
: $V_{CE(\text{sat})} = 1.0V(\text{Max}) @ I_C = 5A$

APPLICATIONS

- Designed for use in horizontal deflection output stages of TV's and CRT's

ABSOLUTE MAXIMUM RATINGS($T_a=25$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|--|---------|------|
| V_{CBO} | Collector-Base Voltage | 400 | V |
| V_{CEV} | Collector-Emitter Voltage | 400 | V |
| V_{CEO} | Collector-Emitter Voltage | 200 | V |
| V_{EBO} | Emitter-Base Voltage | 6 | V |
| I_C | Collector Current-Continuous | 7 | A |
| I_{CP} | Collector Current-Peak Repetitive | 10 | A |
| I_{CP} | Collector Current- Peak (10ms) | 15 | A |
| I_B | Base Current | 4 | A |
| P_C | Collector Power Dissipation @ $T_C=25$ | 90 | W |
| T_J | Junction Temperature | 150 | |
| T_{stg} | Storage Temperature Range | -65~150 | |



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ELECTRICAL CHARACTERISTICS

 $T_C=25$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------|--------------------------------------|--|-----|------|-------------------|---------|
| $V_{CEO(SUS)}$ | Collector-Emitter Sustaining Voltage | $I_C=100mA; I_B=0$ | 200 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=5A; I_B=0.5A$ | | | 1.0 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C=5A; I_B=0.5A$ | | | 1.2 | V |
| I_{CES} | Collector Cutoff Current | $V_{CE}=400V; V_{BE}=0$ $V_{CE}=250V; V_{BE}=0$ $V_{CE}=250V; V_{BE}=0; T_C=150$ | | | 5.0 0.1 1.0 | mA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB}=6V; I_C=0$ | | | 1.0 | mA |
| f_T | Current-Gain—Bandwidth Product | $I_C=0.5A; V_{CE}=10V; f_{test}=20MHz$ | 10 | | | MHz |
| C_{OB} | Output Capacitance | $I_E=0; V_{CB}=10V; f_{test}=1.0MHz$ | | 80 | | pF |
| t_f | Fall Time | $I_C=5A; I_{B1}=-I_{B2}=0.5A, L=150\mu H$ $V_{CC}=40V$ | | | 0.75 | μs |