

isc Silicon NPN Power Transistor
2SD917
DESCRIPTION

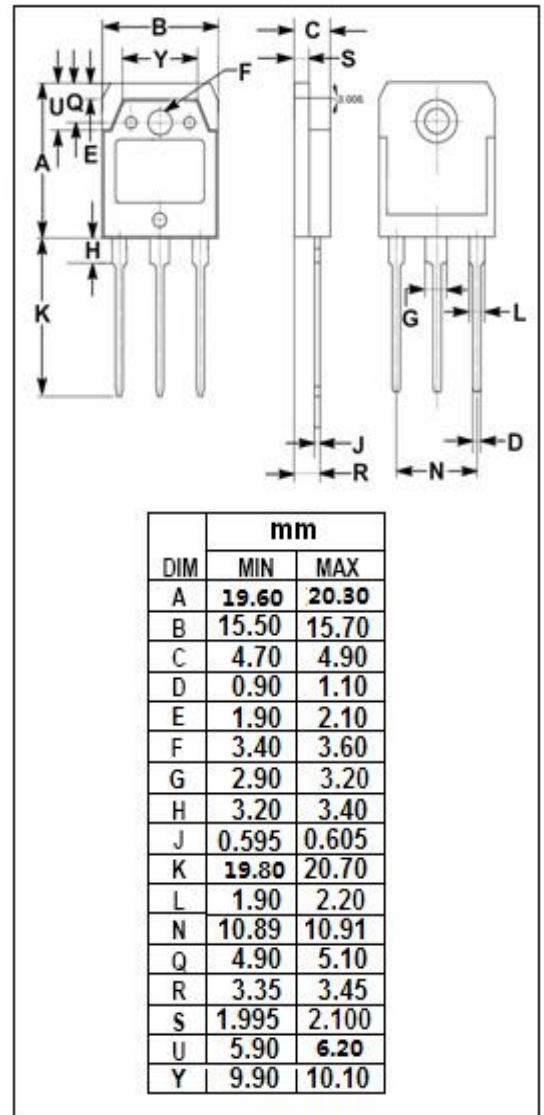
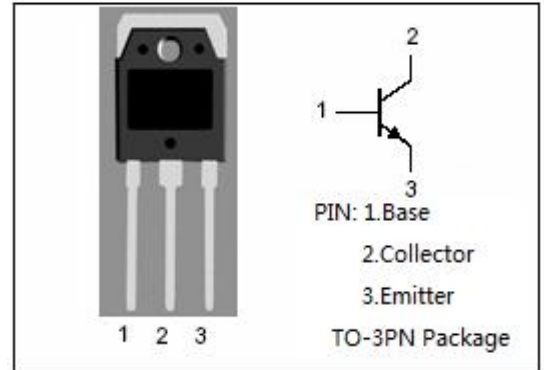
- High Collector-Base Breakdown Voltage-
: $V_{(BR)CBO} = 330V(\text{Min})$
- High Power Dissipation
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for horizontal deflection output applications.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|--|---------|------------------|
| V_{CBO} | Collector-Base Voltage | 330 | 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-Pulse | 10 | A |
| I_{CP} | Collector Current-Pulse Nonrepetitive | 15 | A |
| P_C | Collector Power Dissipation @ $T_C=25^\circ\text{C}$ | 70 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ\text{C}$ |



isc Silicon NPN Power Transistor**2SD917****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|--|-----|------|------|---------------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C= 10\text{mA} ; I_B= 0$ | 200 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C= 5\text{A}; I_B= 0.5\text{A}$ | | | 1.0 | V |
| $V_{BE(sat)}$ | Base -Emitter Saturation Voltage | $I_C= 5\text{A}; I_B= 0.5\text{A}$ | | | 1.2 | V |
| I_{CES} | Collector Cutoff Current | $V_{CE}= 330\text{V} ; V_{BE}= 0$ | | | 1 | mA |
| | | $V_{CE}= 300\text{V}; V_{BE}= 0, T_a= 100^\circ\text{C}$ | | | 15 | |
| I_{EBO} | Emitter Cutoff Current | $V_{EB}= 6\text{V}; I_C= 0$ | | | 1 | mA |
| h_{FE} | DC Current Gain | $I_C= 5\text{A} ; V_{CE}= 4\text{V}$ | 15 | | 45 | |
| t_f | Fall Time | $I_C= 5\text{A} , R_B= 0.5\Omega , I_{B1}= 0.8\text{A}, V_{EB}= 5\text{V}$ | | | 0.75 | μs |

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