

isc Silicon NPN Darlington Power Transistor

2SD920

DESCRIPTION

- · High DC Current Gain
 - : h_{FE}= 700(Min.)@ I_C= 1A, V_{CE}= 4V
- · High Collector-Emitter Breakdown Voltage-
 - $: V_{(BR)CEO} = 200V(Min)$
- · Low Collector Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

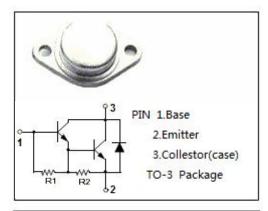


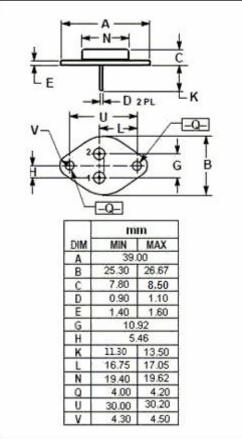
APPLICATIONS

 Designed for series regulators ,color TV, power supplies and similar devices applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

| SYMBOL | PARAMETER | VALUE | UNIT | |
|------------------|--|---------|------------|--|
| V _{CBO} | Collector-Base Voltage | 200 | V | |
| V_{CEO} | Collector-Emitter Voltage | 200 | V | |
| V _{EBO} | Emitter-Base Voltage | 5 | V | |
| Ic | Collector Current-Continuous | 5 | А | |
| I _{CM} | Collector Current-Peak | 8 | Α | |
| Pc | Collector Power Dissipation @T _C =25°C | 100 | W | |
| Tj | Junction Temperature 150 | | $^{\circ}$ | |
| T _{stg} | Storage Temperature Range | -55~150 | $^{\circ}$ | |







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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|------------------------|--------------------------------------|---|-----|------|-------|------|
| V _{(BR)CEO} | Collector-Emitter Breakdown Voltage | I _C = 30mA, I _B = 0 | 200 | | | V |
| V _{CE(sat)-1} | Collector-Emitter Saturation Voltage | I _C = 3A ,I _B = 12mA | | | 2.0 | V |
| V _{CE(sat)-2} | Collector-Emitter Saturation voltage | Ic= 5A ,I _B = 20mA | | | 4.0 | V |
| V _{BE(on)} | Base-Emitter On Voltage | I _C = 3.0A; V _{CE} = 3V | | | 2.5 | V |
| I _{CBO} | Collector Cutoff current | V _{CB} = 200V, I _E = 0 | | | 0.1 | mA |
| Iceo | Collector Cutoff Current | V _{CE} = 200V, I _B = 0 | | | 0.5 | mA |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 5V; I _C = 0 | | | 5 | mA |
| h _{FE} | DC Current Gain | I _C = 1A; V _{CE} = 4V | 700 | | 20000 | |

NOTICE:

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