

isc Silicon NPN Power Transistor

2SD1426

DESCRIPTION

- High Breakdown Voltage
- · High Switching Speed
- Built-in damper diode
- Low Saturation Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

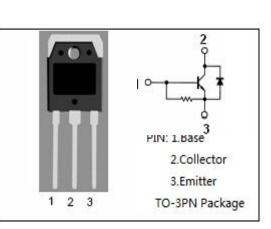
Designed for use in horizontal deflection circuits of colour TV receivers.

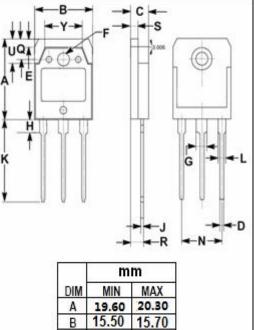
| ABSOLUTE MAXIMUM RATINGS (Ta=250 | 2) |
|----------------------------------|----|
|----------------------------------|----|

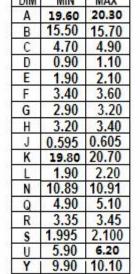
| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--|---------|------|
| V _{сво} | Collector-Base Voltage | 1500 | V |
| V _{CEO} | Collector-Emitter Voltage | 600 | V |
| V _{EBO} | Emitter-Base Voltage | 5 | V |
| Ic | Collector Current-Continuous | 3.5 | А |
| I _B | Base Current-Continuous | 1.0 | А |
| Pc | Collector Power Dissipation @T _c =25°C | 80 | W |
| Tj | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature Range | -55-150 | °C |

THERMAL CHARACTERISTICS

| SYMBO L | PARAMETER | МАХ | UNIT |
|------------|--------------------------------------|------|-------------|
| Rth j-c | Thermal Resistance, Junction to Case | 1.56 | ℃ /W |







isc website: <u>www.iscsemi.com</u>



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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | МАХ | UNIT |
|----------------------|--------------------------------------|---|-----|-----|-----|------|
| V _{(BR)EBO} | Emitter-Base Breakdown Voltage | I _E = 200mA; I _C = 0 | 5 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 3A; I _B = 0.8A | | | 8.0 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = 3A; I _B = 0.8A | | | 1.5 | V |
| h _{FE} | DC Current Gain | I _C = 0.5A ; V _{CE} = 5V | 8 | | | |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 500V; I _E = 0 | | | 10 | μA |
| f⊤ | Transition Frequency | I _C = 0.1A ; V _{CE} = 10V; f= 1MHz | | 3 | | MHz |
| Сов | Output Capacitance | I _E = 0; V _{CB} = 10V; f _{test} = 1MHz | | 95 | | pF |
| V_{ECF} | C-E Diode Forward Voltage | I _F = 3.5A | | | 2.0 | V |
| t _f | Fall Time | I _C = 3A; I _{B1} = 0.8A | | | 1.0 | μS |

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