

## **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

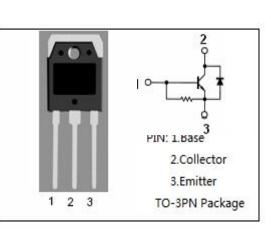
Designed for use in horizontal deflection circuits of colour TV receivers.

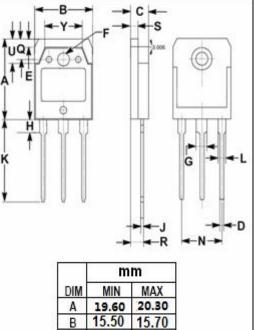
ABSOLUTE MAXIMUM RATINGS (Ta=250	2)
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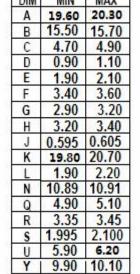
SYMBOL	PARAMETER	VALUE	UNIT
V <sub>сво</sub>	Collector-Base Voltage	1500	V
V <sub>CEO</sub>	Collector-Emitter Voltage	600	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current-Continuous	3.5	А
I <sub>B</sub>	Base Current-Continuous	1.0	А
Pc	Collector Power Dissipation @T <sub>c</sub> =25°C	80	W
Tj	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55-150	°C

#### THERMAL CHARACTERISTICS

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







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 <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 200mA; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 3A; I <sub>B</sub> = 0.8A			8.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 3A; I <sub>B</sub> = 0.8A			1.5	V
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.5A ; V <sub>CE</sub> = 5V	8			
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 500V; I <sub>E</sub> = 0			10	μA
f⊤	Transition Frequency	I <sub>C</sub> = 0.1A ; V <sub>CE</sub> = 10V; f= 1MHz		3		MHz
Сов	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 10V; f <sub>test</sub> = 1MHz		95		pF
$V_{\text{ECF}}$	C-E Diode Forward Voltage	I <sub>F</sub> = 3.5A			2.0	V
t <sub>f</sub>	Fall Time	I <sub>C</sub> = 3A; I <sub>B1</sub> = 0.8A			1.0	μS

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