

# **ISC Silicon NPN Power Transistor**

2SC3676

#### **DESCRIPTION**

- · Low Collector Saturation Voltage
- · High breakdown voltage
- Small Cob
- · Good Linearity of hFE
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

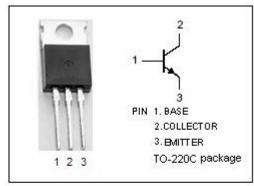


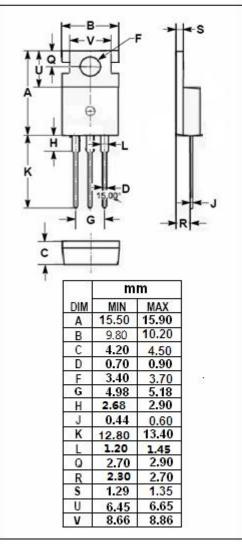
### **APPLICATIONS**

- · High voltage amplifier
- · High-voltage switching applications
- · Dynamis focus applications



SYMBOL	PARAMETER	VALUE	UNIT
V <sub>СВО</sub>	Collector-Base Voltage	1500	V
$V_{\text{CEO}}$	Collector-Emitter Voltage	900	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current-Continuous	0.3	Α
I <sub>CM</sub>	Collector Current-Pulse	1.0	Α
Pc	Collector Power Dissipation @ T <sub>C</sub> =25 °C	20	W
TJ	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range -55~150		$^{\circ}$ C







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#### **ELECTRICAL CHARACTERISTICS**

 $T_c=25$ °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 1mA ; I <sub>B</sub> = 0	900			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> =60mA; I <sub>B</sub> =12mA			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 60mA; I <sub>B</sub> = 12mA			2.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 900V; I <sub>E</sub> = 0			10	μ <b>A</b>
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 4V; I <sub>C</sub> = 0			10	μ <b>A</b>
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 30mA ; V <sub>CE</sub> = 5V	30			
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> =30mA ; V <sub>CE</sub> = 10V		6		MHz
Сов	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = 100V;f <sub>test</sub> = 1.0MHz		5.0		pF

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