

### **INCHANGE SEMICONDUCTOR**

## **isc Silicon NPN Power Transistor**

# 2SC5885

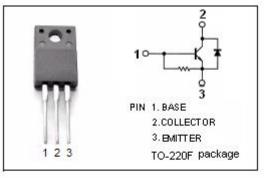
#### DESCRIPTION

- · High Breakdown Voltage
- Wide Area of Safe Operation
- Built-in Damper Diode
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

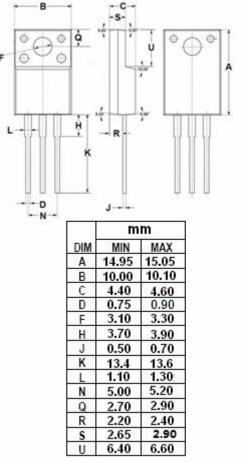
### APPLICATIONS

 Horizontal deflection output for TV, CRT monitor applications.

#### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)



SYMBOL	PARAMETER	VALUE	UNIT	• В
V <sub>CBO</sub>	Collector-Base Voltage	1500	v	F
V <sub>CES</sub>	Collector-Emitter Voltage	1500	V	
V <sub>EBO</sub>	Emitter-Base Voltage 5		V	L-1,-1,   .
lc	Ic Collector Current- Continuous 6			D
I <sub>B</sub>	Base Current- Continuous	3	А	- N -
I <sub>CP</sub>	Collector Current-Pulse	9	A	
Pc	Collector Power Dissipation @ $T_a=25^{\circ}C$	Γ <sub>a</sub> =25℃ 2		
	Collector Power Dissipation @ T <sub>c</sub> =25°C	30	W	
TJ	Junction Temperature	150	°C	
Tstg	Storage Temperature Range	-55~150	°C	
	1			27 C



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### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 500mA; I <sub>C</sub> = 0	5			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage $I_{C}$ = 3A; $I_{B}$ = 0.75A				2.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	nitter Saturation Voltage $I_{C}$ = 3A; $I_{B}$ = 0.75A			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 1000V; I <sub>E</sub> = 0 V <sub>CB</sub> = 1500V; I <sub>E</sub> = 0			50 1.0	μA mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 3A; V <sub>CE</sub> = 5V	5		10	
V <sub>ECF</sub>	C-E Diode Forward Voltage	IF= 3A			2.0	V
fT	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.1A; V <sub>CE</sub> = 10V; f= 0.5MHz		3		MHz

Switching times; Resistive load

t <sub>stg</sub>	Storage Time	7	I <sub>C</sub> = 3A, I <sub>B1</sub> = 0.75A; I <sub>B2</sub> = -1.5A		5.0	μ \$
tf	Fall Time				0.5	μ <b>s</b>

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