

**isc Silicon NPN Power Transistor**

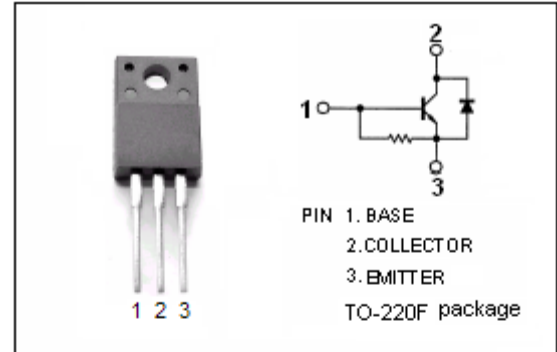
**2SC5885**

**DESCRIPTION**

- High Breakdown Voltage-  
:  $V_{CBO} = 1500V$  (Min)
- Wide Area of Safe Operation
- Built-in Damper Diode

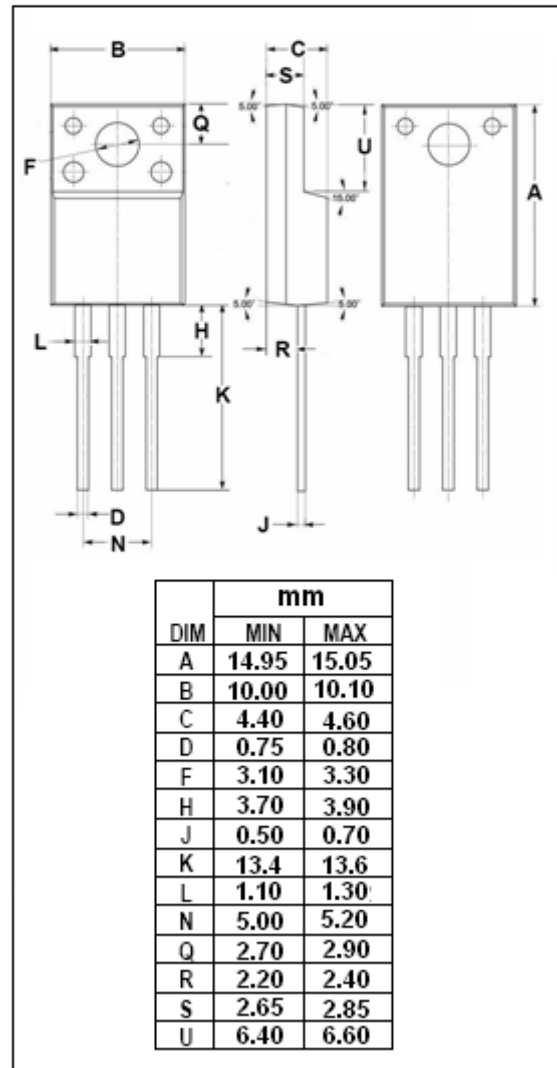
**APPLICATIONS**

- Horizontal deflection output for TV, CRT monitor applications.



**ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}C$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1500	V
$V_{CES}$	Collector-Emitter Voltage	1500	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current- Continuous	6	A
$I_B$	Base Current- Continuous	3	A
$I_{CP}$	Collector Current-Pulse	9	A
$P_C$	Collector Power Dissipation @ $T_a=25^{\circ}C$	2	W
	Collector Power Dissipation @ $T_c=25^{\circ}C$	30	
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



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## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=500\text{mA}; I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=3\text{A}; I_B=0.75\text{A}$			2.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=3\text{A}; I_B=0.75\text{A}$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=1000\text{V}; I_E=0$ $V_{CB}=1500\text{V}; I_E=0$			50 1.0	$\mu\text{A}$ mA
$h_{FE}$	DC Current Gain	$I_C=3\text{A}; V_{CE}=5\text{V}$	5		10	
$V_{ECF}$	C-E Diode Forward Voltage	$I_F=3\text{A}$			2.0	V
$f_T$	Current-Gain—Bandwidth Product	$I_C=0.1\text{A}; V_{CE}=10\text{V}; f=0.5\text{MHz}$		3		MHz

Switching times; Resistive load

$t_{stg}$	Storage Time	$I_C=3\text{A}; I_{B1}=0.75\text{A}; I_{B2}=-1.5\text{A}$			5.0	$\mu\text{s}$
$t_f$	Fall Time				0.5	$\mu\text{s}$