

**isc Silicon NPN Power Transistor**

**2SC6093**

**DESCRIPTION**

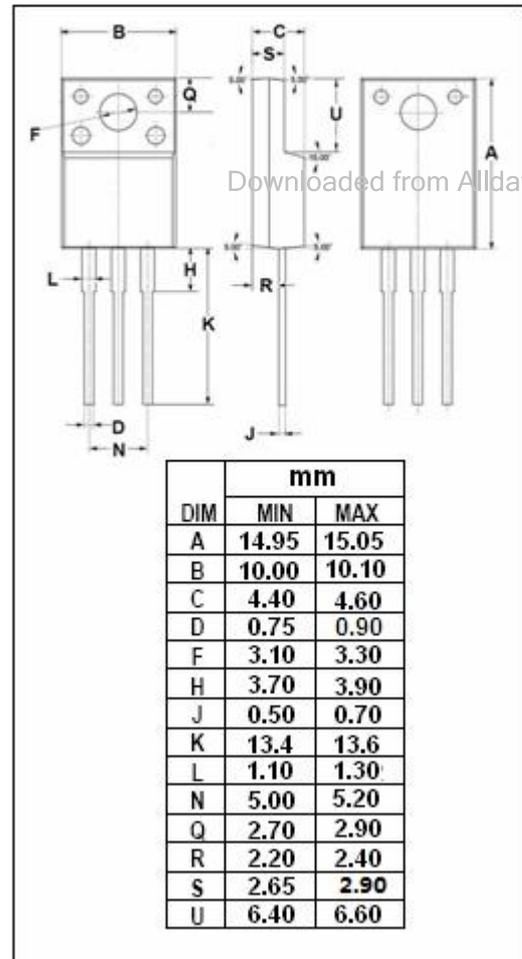
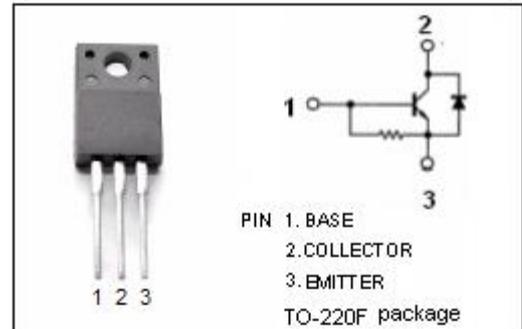
- Low saturation voltage
- Built-in damper diode type
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for high voltage color display horizontal deflection output applications.

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CB0</sub>	Collector-Base Voltage	1500	V
V <sub>CEO</sub>	Collector-Emitter Voltage	800	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current- Continuous	5	A
I <sub>B</sub>	Base Current- Continuous	2	A
I <sub>CP</sub>	Collector Current-Pulse	12	A
P <sub>C</sub>	Collector Power Dissipation @ T <sub>a</sub> =25°C	2	W
	Collector Power Dissipation @ T <sub>C</sub> =25°C	25	
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



**isc Silicon NPN Power Transistor****2SC6093****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C= 1.35A; I_B= 0.27A$	0.1		0.3	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C= 2.7A; I_B= 0.54A$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 2.7A; I_B= 0.54A$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 800V; I_E= 0$			10	$\mu A$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 4V; I_C= 0$	40		130	mA
$h_{FE-1}$	DC Current Gain	$I_C=0.5A; V_{CE}= 5V$	10			
$h_{FE-2}$	DC Current Gain	$I_C= 3A; V_{CE}= 5V$	5.3		7.5	