

isc Silicon NPN Power Transistor

2SC6090

DESCRIPTION

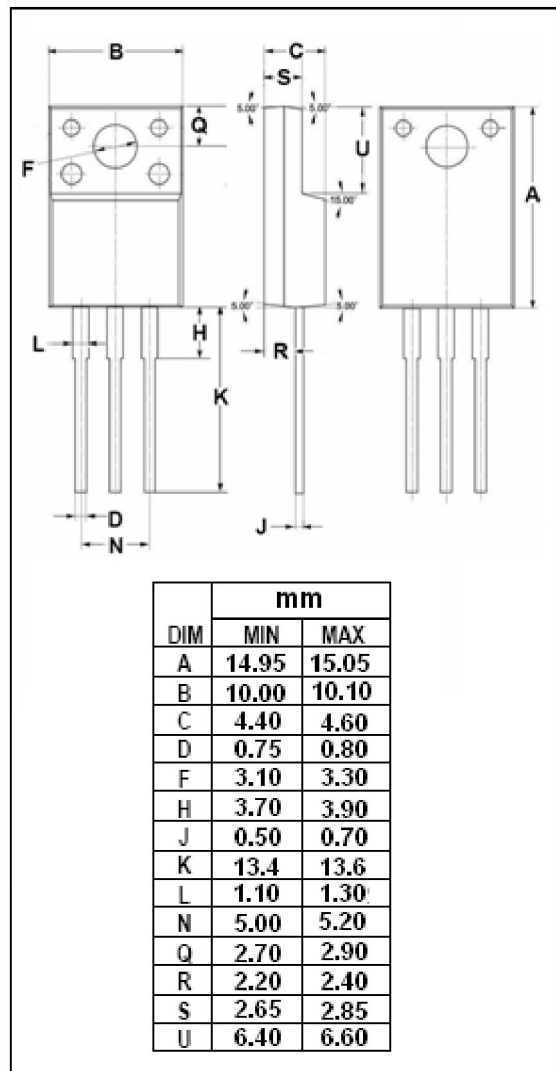
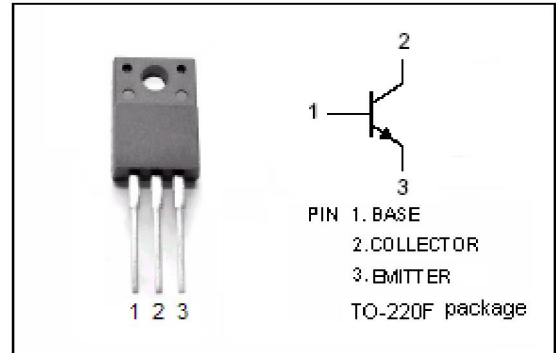
- Collector-Base Breakdown Voltage-
: $V_{(BR)CEO} = 1500V$ (Min)
- High Speed Switching

APPLICATIONS

- Designed for Color TV horizontal deflection output applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	10	A
I_{CP}	Collector Current-Pulse	25	A
P_C	Collector Power Dissipation @ $T_a=25^\circ C$	2	W
	Collector Power Dissipation @ $T_c=25^\circ C$	35	
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=100\text{mA}; I_B=0$	700			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=7.2\text{A}; I_B=1.44\text{A}$			3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=7.2\text{A}; I_B=1.44\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=800\text{V}; I_E=0$			10	μA
I_{CES}	Collector Cutoff Current	$V_{CE}=1500\text{V}; R_{BE}=0$			1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=4\text{V}; I_C=0$			1.0	mA
h_{FE-1}	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	15			
h_{FE-2}	DC Current Gain	$I_C=8\text{A}; V_{CE}=5\text{V}$	5		7	

Switching times

t_f	Fall Time	$I_C=5\text{A}; I_{B1}=1\text{A}; I_{B2}=-2\text{A}$			0.2	μs
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