

isc Silicon PNP Power Transistor
2SB1090
DESCRIPTION

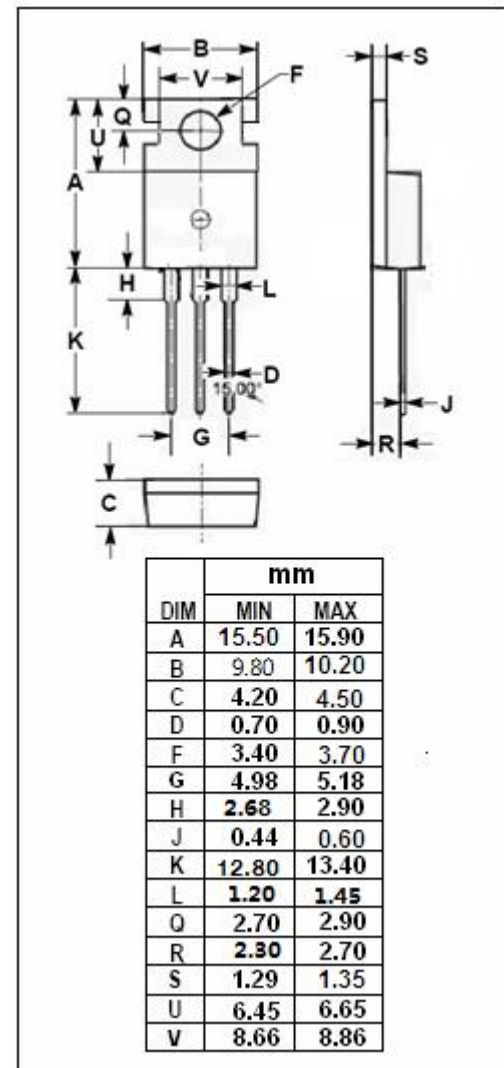
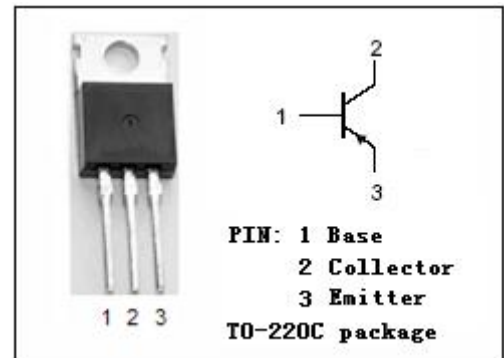
- High Collector Current: $I_C = -4A$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.5V(\text{Max}) @ I_C = -3A$
- Complement to Type 2SD1568
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power supplies or a variety of drives in audio and other equipment.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-4	A
I_B	Base Current-Continuous	-0.8	A
P_C	Total Power Dissipation @ $T_a = 25^\circ\text{C}$	1.3	W
	Total Power Dissipation @ $T_C = 25^\circ\text{C}$	40	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _c = -3A; I _B = -0.3A			-1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _c = -3A; I _B = -0.3A			-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V; I _E = 0			-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0			-10	μ A
h _{FE-1}	DC Current Gain	I _c = -50mA; V _{CE} = -5V	20			
h _{FE-2}	DC Current Gain	I _c = -0.5A; V _{CE} = -5V	40		200	
f _T	Current-Gain—Bandwidth Product	I _c = -0.1A; V _{CE} = -5V		20		MHz

◆ h_{FE-2} Classifications

M	L	K
40-80	60-120	100-200

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