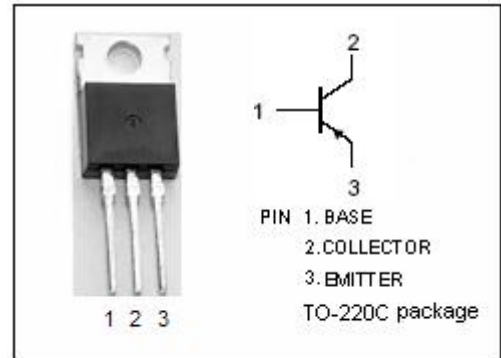


isc Silicon PNP Power Transistor
2SB511
DESCRIPTION

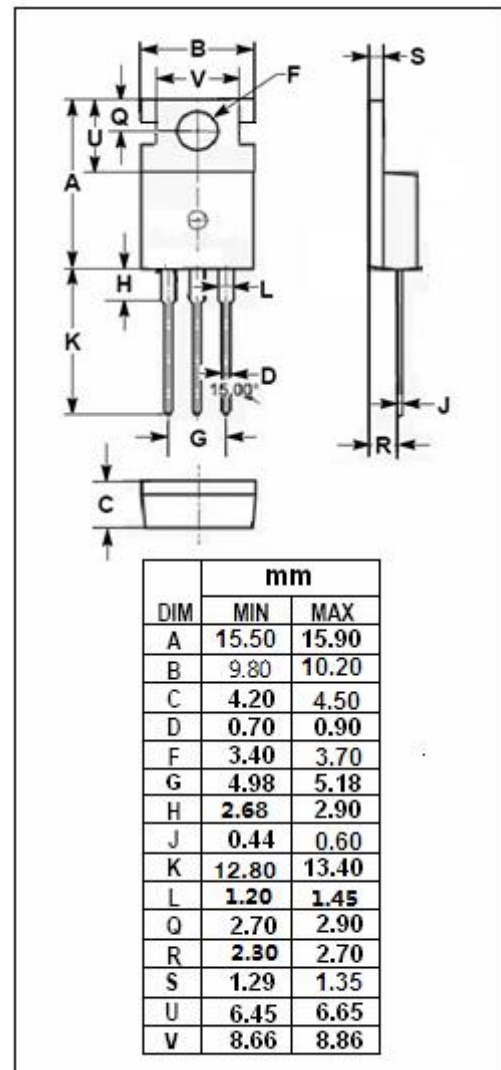
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -35V(\text{Min})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -1.0V(\text{Max}) @ I_C = -1.5A$
- Complement to Type 2SD325
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


APPLICATIONS

- Designed for 5W AF power amplifier output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-35	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-1.5	A
I_{CM}	Collector Current-Peak	-3.0	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1.75	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	10	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor
2SB511
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 = -1.5A; I _B = -0.15A			-1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -1A; V _{CE} = -5V			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -20V; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -4V ; I _C = 0			-1	mA
h _{FE-1}	DC Current Gain	I _C = -1A; V _{CE} = -2V	40		320	
h _{FE-2}	DC Current Gain	I _C = -0.1A ; V _{CE} = -2V	35			
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A; V _{CE} = -5V		8		MHz

◆ h_{FE-1} Classifications

C	D	E	F
40-80	60-120	100-200	160-320

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