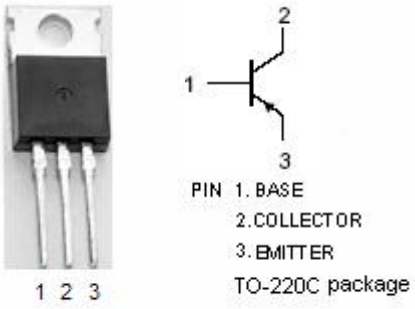
isc Silicon PNP Power Transistor — 2SB511

DESCRIPTION

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

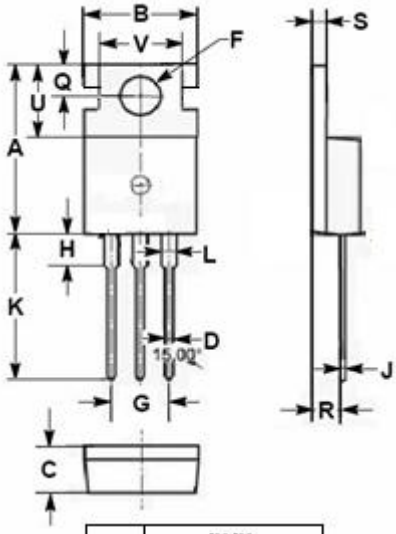


APPLICATIONS

- Designed for 5W AF power amplifier output applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	1.75	W
	Collector Power Dissipation @ T_C=25℃	10	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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ELECTRICAL CHARACTERISTICS

T_C=25℃ 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	μA
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