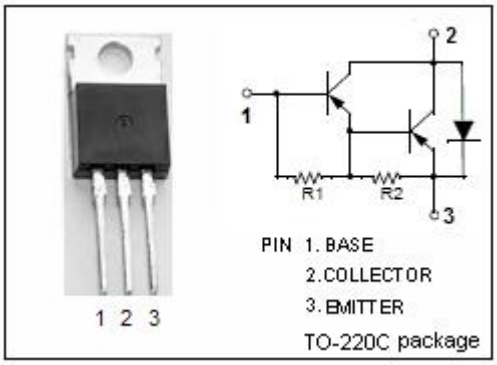
isc Silicon PNP Darlington Power Transistor 2SB1005



DESCRIPTION

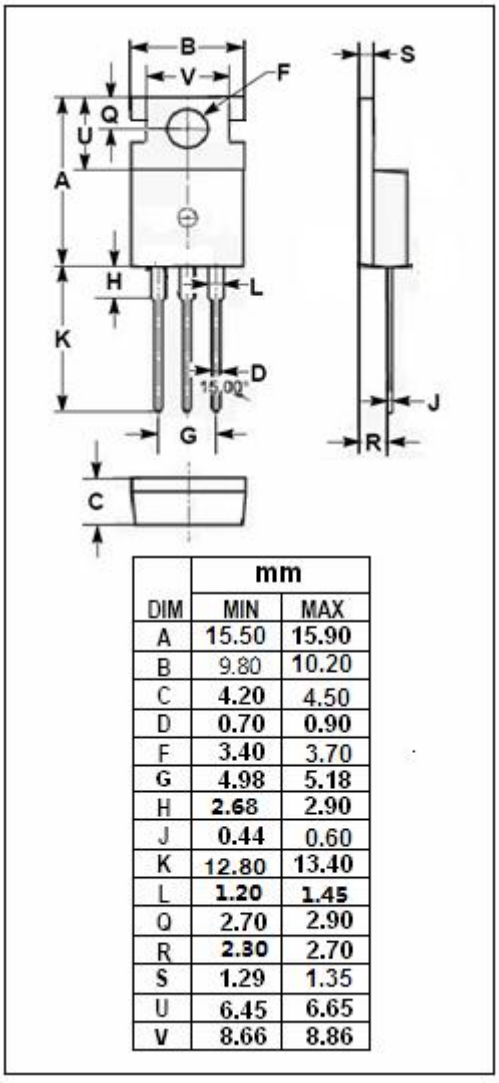
- High DC Current Gain-
  : h_{FE} = 750(Min)@ I_C= -1.5A
- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = -50V(Min)
- With TO-220C package
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio frequency power amplifier applications

ABSOLUTE MAXIMUM RATINGS (Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-4	A
P_C	Collector Power Dissipation T_C=25℃	30	W
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
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -30mA, I_B= 0	-50			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=-1mA, I_E=0	-50			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation voltage	I_C= -1.5A ,I_B= -30mA			-2.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation voltage	I_C= -4A ,I_B= -40mA			-4.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -50V, I_E= 0			-0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-2	mA
h_{FE-1}	DC Current Gain	I_C= -1.5A ; V_{CE}= -3V	750			
h_{FE-2}	DC Current Gain	I_C= -4A ; V_{CE}= -3V	100			
VF	Diode forward voltage	IF=-4A			3.5	V