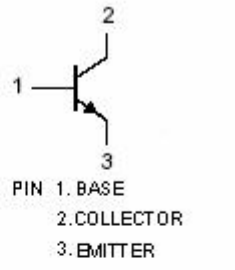
isc Silicon NPN Power Transistor BD347

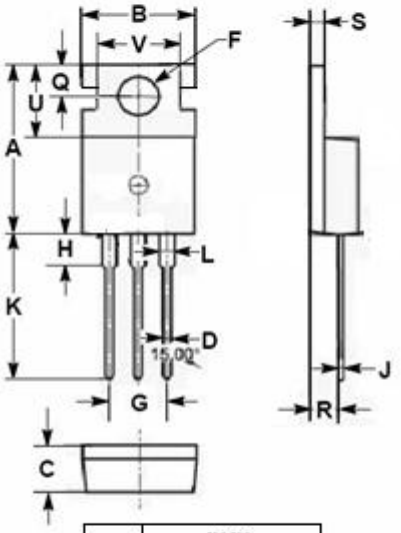


DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 60V(Min)
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 1.0V(Max)@ I_C = 3A
- Good Linearity of h_{FE}
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

- Designed for RF power and general-purpose audio amplifier applications



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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	8	A
I_{CM}	Collector Current-Peak $t_p \leqslant 10ms$	12	A
I_B	Base Current	3	A
P_C	Collector Power Dissipation @ T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 30mA ;I_B= 0	60		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 1mA ;I_E= 0	60		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA ;I_C= 0	5		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 3A; I_B= 0.3A		1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 0.6A		1.5	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= 3A; I_B= 0.3A		1.5	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= 6A; I_B= 0.6A		2.0	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 60V; I_B= 0		0.2	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= 60V;I_E= 0		0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C=0		0.1	mA
h_{FE}	DC Current Gain	I_C= 3A ; V_{CE}= 2V	40		
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A ; V_{CE}= 10V, f_{test}= 1.0MHz	4.0		MHz