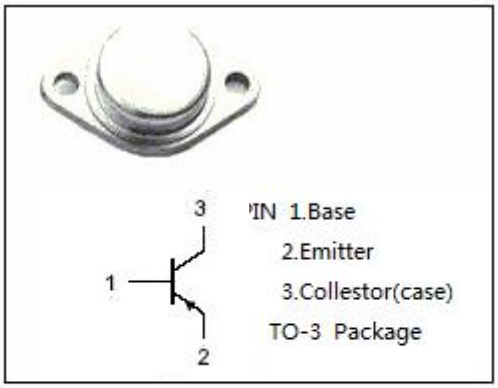
isc Silicon PNP Power Transistors — BD750/750A

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = -90V(Min)- BD750
  = -120V(Min)- BD750A
- High Power Dissipation
- Complement to Type BD751/751A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for high voltage and high power amplifier applications.

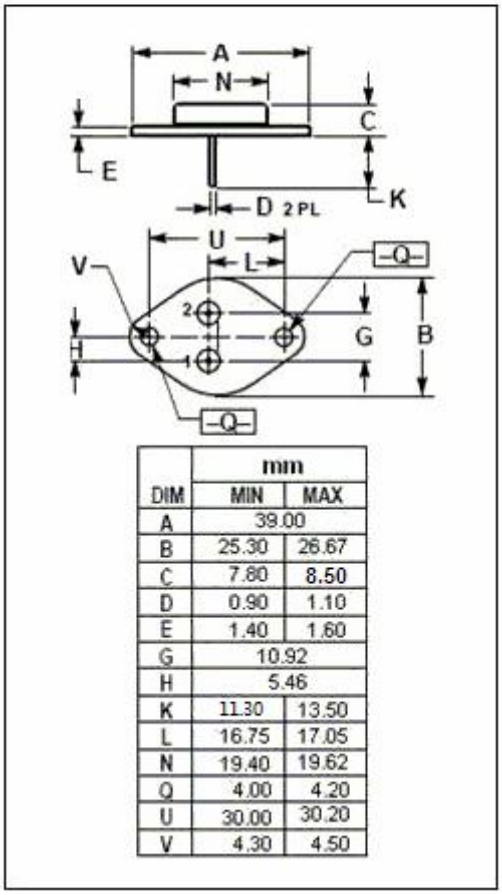


ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CEV}	Collector-Emitter Voltage	BD750	-100	V
		BD750A	-130	
$V_{CEO(SUS)}$	Collector-Emitter Voltage	BD750	-90	V
		BD750A	-120	
V_{EBO}	Emitter-Base Voltage		-7	V
I_C	Collector Current-Continuous		-20	A
I_B	Base Current-Continuous		-5	A
P_C	Collector Power Dissipation@T_C=25℃		200	W
T_J	Junction Temperature		200	℃
T_{stg}	Storage Temperature		-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.875	℃/W



DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

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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	BD750	I_C= -30mA ; I_B= 0	-90			V
		BD750A		-120			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	BD750	I_C= -7.5A; I_B= -0.75A			-1.5	V
		BD750A	I_C= -5A; I_B= -0.5A			-1.0	
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	BD750	I_C= -7.5A; I_B= -0.75A			-1.8	V
		BD750A	I_C= -5A; I_B= -0.5A			-1.8	
I_{CEV}	Collector Cutoff Current	BD750	V_{CEV}= -100V;$V_{BE(off)}$= -1.5V			-0.5	mA
		BD750A	V_{CEV}= -130V;$V_{BE(off)}$= -1.5V			-0.5	
I_{EBO}	Emitter Cutoff Current		V_{EB}= -7V; I_C=0			-1.0	mA
h_{FE}	DC Current Gain	BD750	I_C= -7.5A ; V_{CE}= -2V	15		60	
		BD750A	I_C= -5A ; V_{CE}= -2V	25		100	
f_T	Current-Gain—Bandwidth Product		I_C= -0.5A ;V_{CE}= -10V; f_{test}= 1MHz	4			MHz