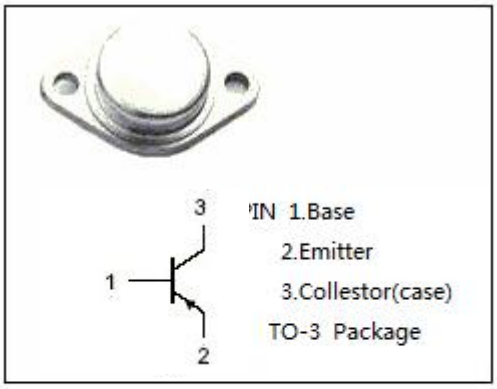
SPTECH Silicon PNP Power Transistors

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = -100V(Min)- BD751B
  = -130V(Min)- BD751C
- High Power Dissipation
- Complement to Type BD751B/751C



APPLICATIONS

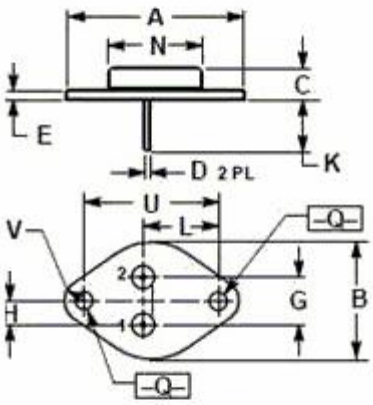
- Designed for high voltage and high power amplifier applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CEV}	Collector-Emitter Voltage	BD750B	-110	V
		BD750C	-140	
$V_{CEO(SUS)}$	Collector-Emitter Voltage	BD750B	-100	V
		BD750C	-130	
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℃		250	W
T_J	Junction Temperature		200	℃
T_{stg}	Storage Temperature		-65~200	℃

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

TH



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

SPTECH Silicon PNP Power Transistors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	BD750B	I_C= -30mA ; I_B= 0	-100			V
		BD750C		-130			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	BD750B	I_C= -7.5A; I_B= -0.75A			-1.5	V
		BD750C	I_C= -5A; I_B= -0.5A			-1.0	
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	BD750B	I_C= -7.5A; I_B= -0.75A			-1.8	V
		BD750C	I_C= -5A; I_B= -0.5A			-1.8	
I_{CEV}	Collector Cutoff Current	BD750B	V_{CEV}= -110V;$V_{BE(off)}$= -1.5V			-0.5	mA
		BD750C	V_{CEV}= -140V;$V_{BE(off)}$= -1.5V			-0.5	
I_{EBO}	Emitter Cutoff Current		V_{EB}= -7V; I_C=0			-1.0	mA
h_{FE}	DC Current Gain	BD750B	I_C= -7.5A ; V_{CE}= -2V	15		60	
		BD750C	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