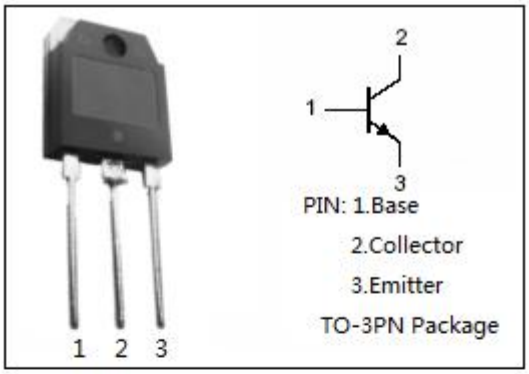
SPTECH Silicon NPN Power Transistor

DESCRIPTION

- High DC current amplifier rate
  h_{FE}: 50-200@V_{CE}= 5V,I_C= 1A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

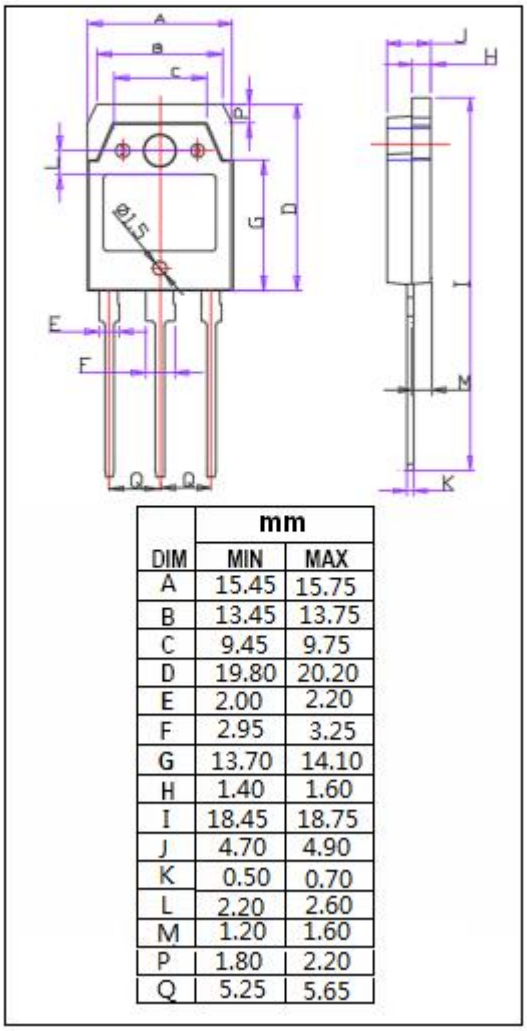
APPLICATIONS

- High power audio, disk head positioners and other linear applications.



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	250	V
V_{CEO}	Collector-Emitter Voltage	250	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	15	A
I_{CP}	Collector Current-Pulse	30	A
I_B	Base Current-Continuous	1.5	A
P_C	Total Power Dissipation @ T_C=25℃	150	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	MAX
A	15.45	15.75
B	13.45	13.75
C	9.45	9.75
D	19.80	20.20
E	2.00	2.20
F	2.95	3.25
G	13.70	14.10
H	1.40	1.60
I	18.45	18.75
J	4.70	4.90
K	0.50	0.70
L	2.20	2.60
M	1.20	1.60
P	1.80	2.20
Q	5.25	5.65

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.63	℃/W

SPTECH Silicon NPN Power Transistor

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C=100mA ; I_B=0	250		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 1A		2	V
$V_{BE(on)}$	Base-Emitter Saturation Voltage	I_C= 8A; V_{CE}= 5V		2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 250V ; I_E=0		50	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C=0		5	μA
h_{FE-1}	DC Current Gain	I_C= 100mA ; V_{CE}= 5V	75	150	
h_{FE-2}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	75	150	
h_{FE-3}	DC Current Gain	I_C= 8A ; V_{CE}= 5V	75		
h_{FE-4}	DC Current Gain	I_C= 15A ; V_{CE}= 5V	12		