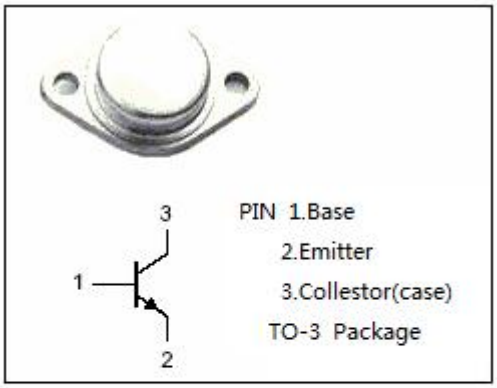
SPTECH Silicon NPN Power Transistors

DESCRIPTION

High Power Dissipation

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 110V(Min)

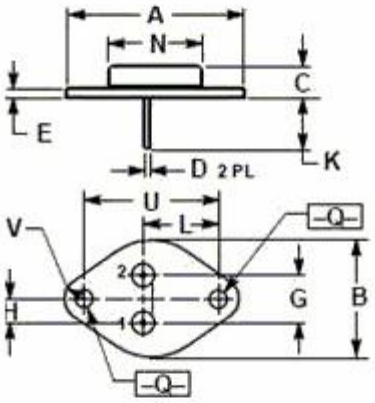


APPLICATIONS

- Designed for use as either driver or output unit applications in audio amplifier circuits.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	MAX	UNIT
V_{CBO}	Collector-Base Voltage	130	V
V_{CER}	Collector-Emitter Voltage R_{BE}= 100Ω	130	V
V_{CEO}	Collector-Emitter Voltage	110	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	7	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation @T_C=25℃	150	W
T_j	Junction Temperature	200	℃
T_{stg}	Storage Temperature Range	-65~200	℃



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 NPN Power Transistors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA ; I_B= 0	110			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B= 0.5A			2	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 4A ;V_{CE}= 4V			1.75	V
I_{CER}	Collector Cutoff Current	V_{CE}= 110V; R_{BE}= 100Ω			1	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 95V; I_B= 0			5	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			1	mA
h_{FE}	DC Current Gain	I_C= 4A ; V_{CE}= 4V	15		75	
f_T	Current Gain-Bandwidth Product	I_C= 0.2A ; V_{CE}= 10V		5		MHz