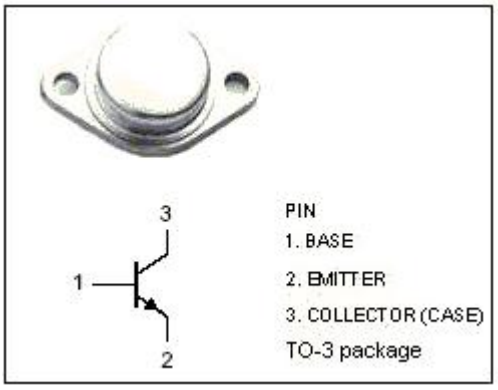
SPTECH Silicon NPN Power Transistor

DESCRIPTION

Wide area of safe operation

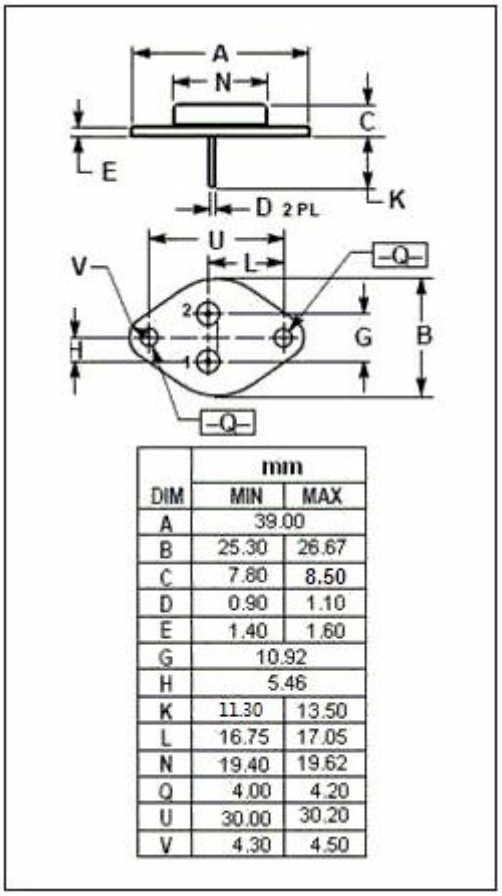


APPLICATIONS

For audio frequency power amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	8	A
P_C	Collector Power Dissipation @ T_C=25℃	70	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-50~150	℃



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 Transistor

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector- Emitter Breakdown Voltage	I_C= 50mA ; I_E= 0	100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Vltage	I_E= 1mA ; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A			2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 5A ; I_B= 0.5A			2.5	V
I_{CBO}	Collector cut-off current	V_{CB}=160V; I_E=0			0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			0.1	mA
h_{FE}	DC current gain	I_C=3A ; V_{CE}=4V	30			
f_T	Transition frequency	I_C=0.5A ; V_{CE}=10V		10		MHz