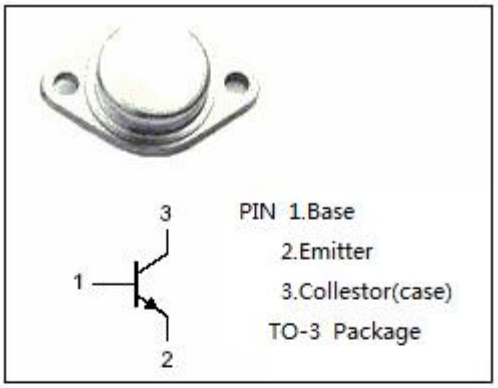
SPTECH Silicon NPN Power Transistors



DESCRIPTION

With TO-3 package

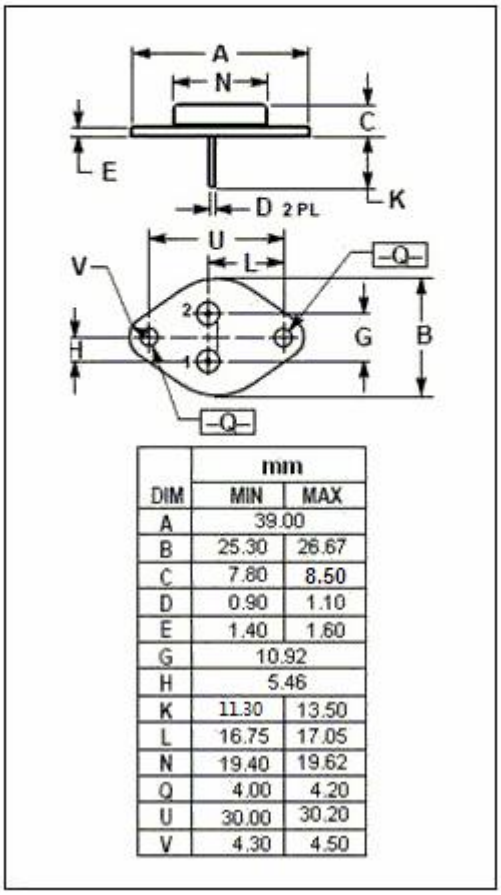
- Large current capability
- Wide area of safe operation

APPLICATIONS

- For audio frequency output applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	7	A
P_C	Collector Power Dissipation @T_C=75℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃



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 Transistors

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA ;I_B=0	100			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=1mA ;I_E=0	100			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=1mA ;I_C=0	6			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=5A ; I_B=0.5A			2.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=5A ; I_B=0.5A			2.5	V
I_{CBO}	Collector cut-off current	V_{CB}=100V; I_E=0			0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=6V; I_C=0			0.1	mA
h_{FE}	DC current gain	I_C=3A ; V_{CE}=2V	30		120	
f_T	Transition frequency	I_C=0.5A ; V_{CE}=10V		10		MHz