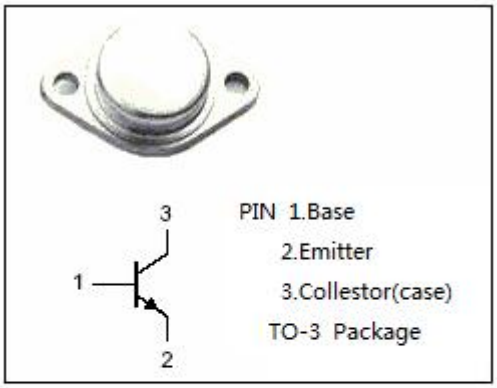
SPTECH Silicon NPN Power Transistor

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 100V(Min.)
- DC Current Gain-
  : h_{FE}= 30~250(Min.)@I_C= 2A
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 1.5V(Max)@ I_C= 2.5A



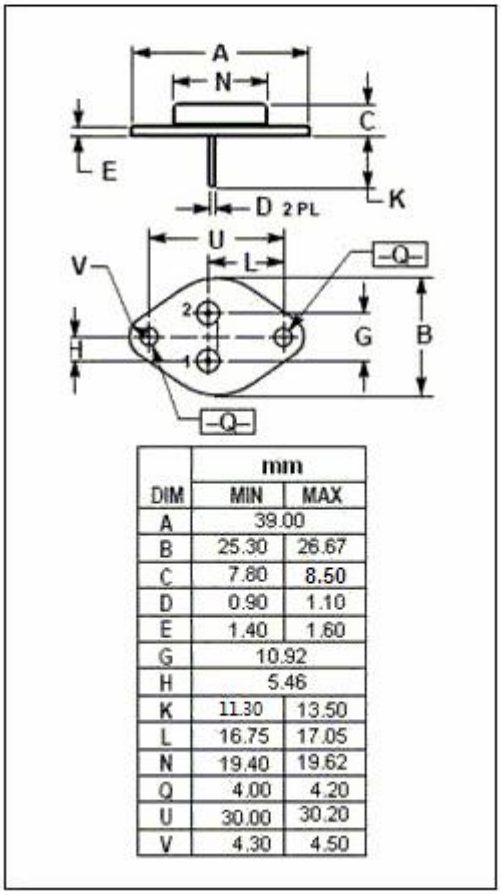
APPLICATIONS

- Designed for B&W TV horizontal output , regulated power supply and power amplifier applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	5	A
P_C	Collector Power Dissipation@T_C=75℃	50	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	2.0	℃/W



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	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 5mA; I_B= 0	100		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 0.1mA; I_E= 0	150		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	5		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2.5A; I_B= 0.25A		1.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= 50V; I_B=0		1.0	mA
I_{CBO}	Collector Cutoff Current	V_{CB}= 50V; I_E=0		0.5	mA
h_{FE}	DC Current Gain	I_C= 2A; V_{CE}= 10V	30	250	
t_f	Fall Time	I_C= 3A; I_{B1}= 0.2A, I_{B2}= -0.3A,		1.0	μs