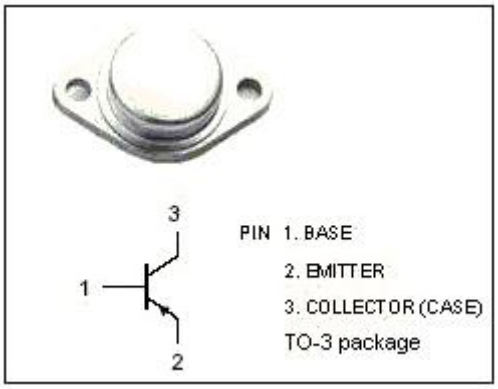
SPTECH Silicon PNP Power Transistor

DESCRIPTION

- High DC Current Gain-
  : h_{FE}= 25-100@I_C= -7.5A
- Excellent Safe Operating Area
- Complement to the NPN MJ802



APPLICATIONS

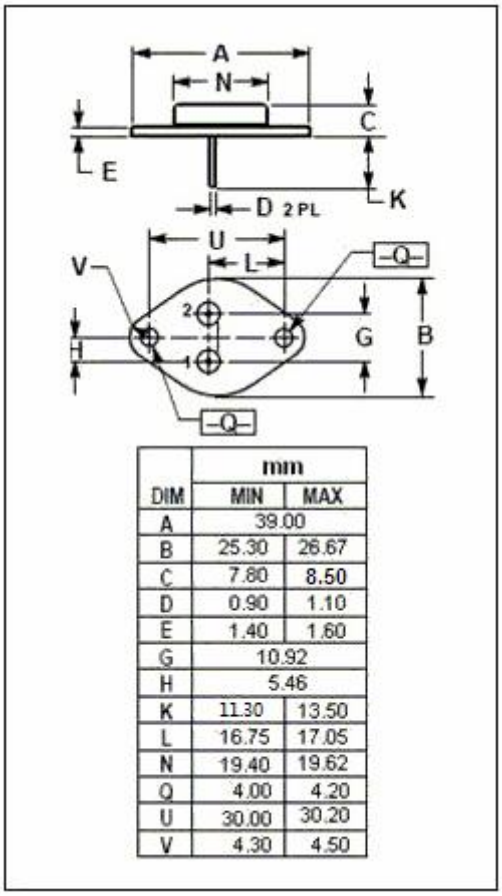
- Designed for use as an output device in complementary audio amplifiers to 100-Watts music power per channel.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-90	V
V_{EBO}	Emitter-Base Voltage	-4	V
I_C	Collector Current-Continuous	-30	A
I_B	Base Current-Continuous	-7.5	A
P_C	Collector Power Dissipation@T_C=25℃	200	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	0.875	℃/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 PNP Power Transistor

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	-90			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -7.5A; I_B= -0.75A			-0.8	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -7.5A; I_B= -0.75A			-1.3	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -7.5A ; V_{CE}= -2V			-1.3	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -100V; I_E= 0,T_C= 150℃			-1.0	mA
I_{EBO}	Emitter Cutoff current	V_{EB}= -4V; I_C= 0			-1.0	mA
h_{FE}	DC Current Gain	I_C= -7.5A ; V_{CE}= -2V	25		100	
f_T	Current-Gain—Bandwidth Product	I_C= -1A;V_{CE}= -10V;f= 1.0MHz	2.0			MHz