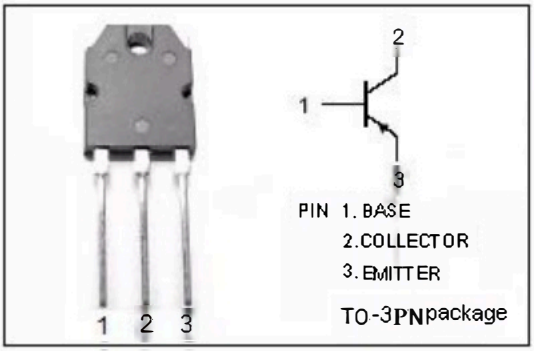
SPTECH Silicon PNP Power Transistor 2SA1939



DESCRIPTION

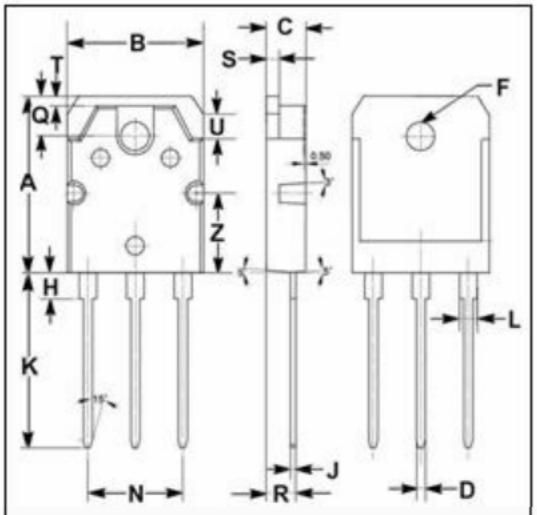
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= -2.0V(Min) @I_C= -5A
- Good Linearity of h_{FE}
- Complement to Type 2SC5196

APPLICATIONS

- Power amplifier applications
- Recommend for 40W high fidelity audio frequency amplifier output stage applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-6	A
I_B	Base Current-Continuous	-0.6	A
P_C	Collector Power Dissipation @ T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	19.60	20.10
B	15.30	15.70
C	4.00	4.60
D	0.90	1.10
F	3.20	3.40
H	2.90	3.10
J	0.50	0.70
K	19.90	21.30
L	1.20	2.20
N	10.80	11.00
Q	4.40	4.60
R	3.30	3.35
S	1.40	1.60
T	1.00	1.20
U	2.10	2.30
Z	7.90	9.10

SPTECH Silicon PNP 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_B= 0	-80			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -5A; I_B= -0.5A			-2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -3A; V_{CE}= -5V			-1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -80V; I_E= 0			-5	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-5	μA
h_{FE-1}	DC Current Gain	I_C= -1A; V_{CE}= -5V	55		160	
h_{FE-2}	DC Current Gain	I_C= -3A; V_{CE}= -5V	35			
C_{OB}	Output Capacitance	I_E=0; V_{CB}= -10V; f_{test}= 1.0MHz		180		pF
f_T	Current-Gain—Bandwidth Product	I_C= -1A; V_{CE}= -5V		30		MHz

◆ **h_{FE-1} Classifications**

R	O
55-110	80-160