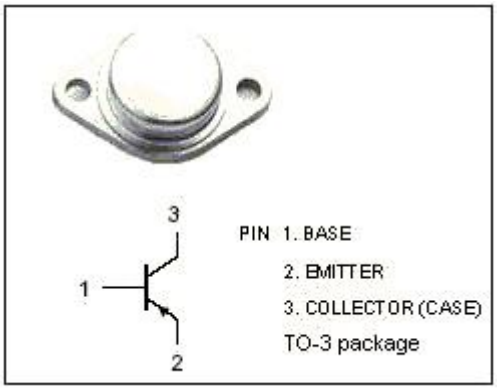
SPTECH Silicon PNP Power Transistors

DESCRIPTION

- Excellent Safe Operating Area
- DC Current Gain-
  : h_{FE}=20-70@I_C= -4A
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= -1.1V(Max)@ I_C= -4A
- Complement to Type 2N3055



APPLICATIONS

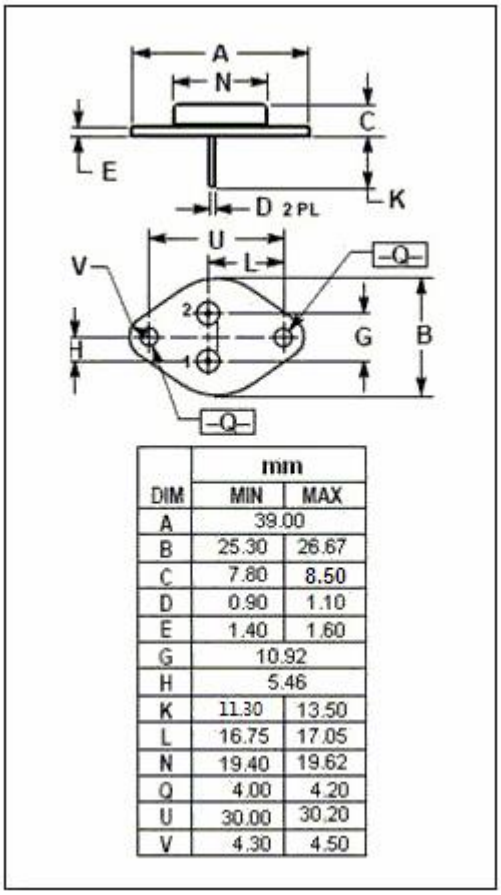
- Designed for general-purpose switching and amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-15	A
I_B	Base Current	-7	A
P_C	Collector Power Dissipation @T_C=25℃	115	W
T_J	Junction Temperature	200	℃
T_{stg}	Storage Temperature	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.52	℃/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 Transistors

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -50mA ; I_B= 0	-65		V
V_{CBO}	Collector- Base Voltage	I_C= -1mA ; I_E= 0	-70		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -4A; I_B= -0.4A		-1.1	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -10A; I_B= -3.3A		-3.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -4A ; V_{CE}= -4V		-1.5	V
I_{CEO}	Collector Cutoff Current	V_{CE}= -30V; I_B= 0		-0.7	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -7.0V; I_C=0		-5.0	mA
h_{FE-1}	DC Current Gain	I_C= -4A ; V_{CE}= -4V	20	70	
h_{FE-2}	DC Current Gain	I_C= -10A ; V_{CE}= -4V	5		
f_T	Current Gain-Bandwidth Product	I_C= -0.5A ; V_{CE}= -10V;f_{test}= 1.0MHz	2.5		MHz