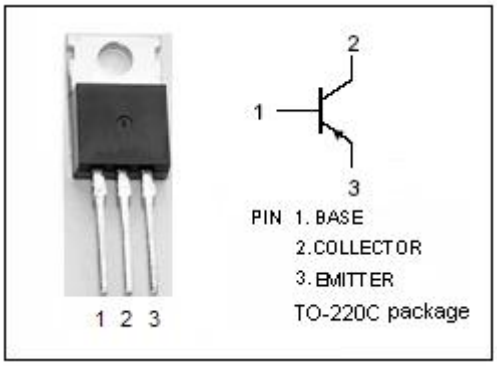
SPTECH Silicon PNP Power Transistors

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = -100V(Min)
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$ = -0.7V(Max.)@I_C= -1.0A
- Complement to Type TIP29C



APPLICATIONS

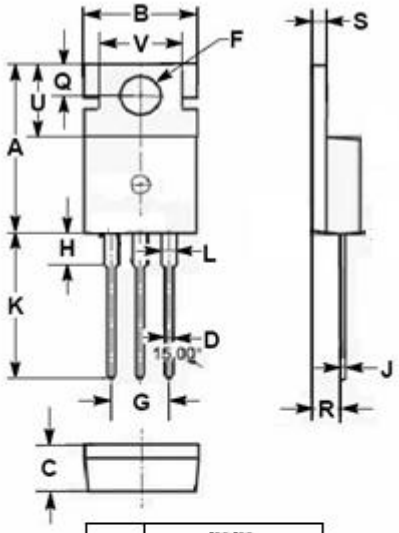
- Designed for use in general purpose amplifier and switching applications.

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	-5	V
I_C	Collector Current-Continuous	-1	A
I_{CM}	Collector Current-Pulse	-3	A
I_B	Base Current	-0.4	A
P_C	Collector Power Dissipation T_C=25℃	30	w
T_j	Junction Temperature	150	℃
T_{stg}	Storage Ttemperature Range	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	4.17	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	62.5	℃/W



DIM	mm MIN	MAX
A	15.50	15.90
B	9.90	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	13.00	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

SPTECH Silicon PNP Power Transistors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -30mA; I_B= 0	-100		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -1A; I_B= -0.125A		-0.7	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -1A; V_{CE}= -4V		-1.3	V
I_{CES}	Collector Cutoff Current	V_{CE}= -100V; V_{BE}= 0		-0.2	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= -100V; I_B= 0		-0.3	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0		-1.0	mA
h_{FE-1}	DC Current Gain	I_C= -0.2A; V_{CE}= -4V	40		
h_{FE-2}	DC Current Gain	I_C= -1A ; V_{CE}= -4V	15	75	
f_T	Current-Gain—Bandwidth Product	I_C= -0.2A; V_{CE}= -10V; f= 1MHz	3		MHz