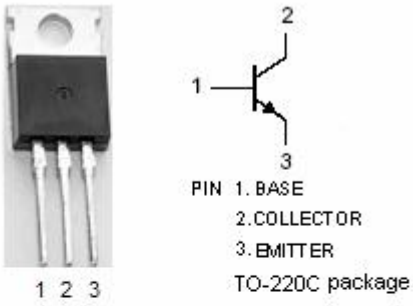
SPTECH Silicon NPN Power Transistor

DESCRIPTION

- High Voltage: V_{CEV}= 330V(Min)
- Fast Switching Speed-
  : t_f= 750ns(Max)
- Low Saturation Voltage-
  : $V_{CE(sat)}$= 1.0V(Max)@ I_C= 5A

APPLICATIONS

- Designed for use in horizontal deflection output stages of TV's and CRT's

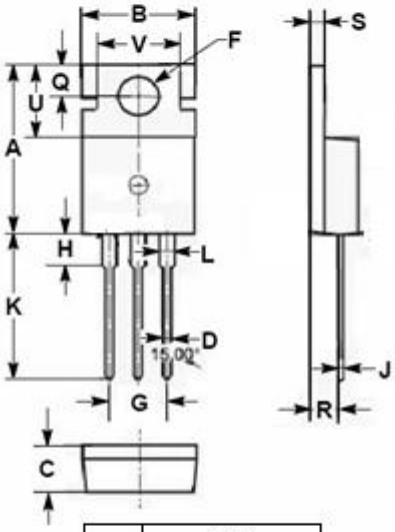


ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	330	V
V_{CEV}	Collector-Emitter Voltage	330	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	7	A
I_{CP}	Collector Current-Peak Repetitive	10	A
I_{CP}	Collector Current- Peak (10ms)	15	A
I_B	Base Current	4	A
P_C	Collector Power Dissipation @ T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	2.08	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance, Junction to Ambient	70	℃/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 NPN 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	150			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 5A; I_B= 0.5A			1.2	V
I_{CES}	Collector Cutoff Current	V_{CE}= 330V; V_{BE}= 0 V_{CE}= 200V; V_{BE}= 0			5.0 0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C=0			1.0	mA
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A ; V_{CE}= 10V	10			MHz
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}= 1.0MHz		80		pF
t_f	Fall Time	I_C= 5A; I_{B1}= -I_{B2}= 0.5A			0.75	μs