SPTECH Silicon NPN Power Transistor

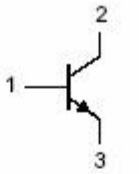
DESCRIPTION

- High Voltage: V_{CEV}= 300V(Min)
- 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





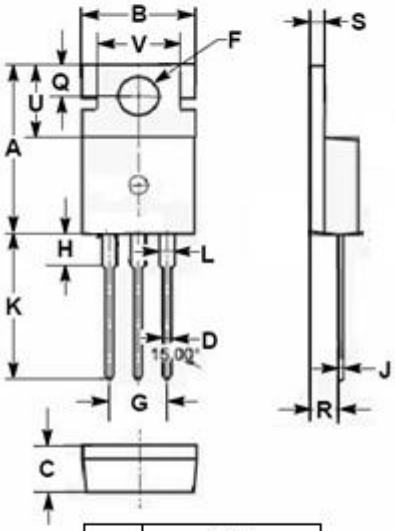
PIN 1. BASE
2. COLLECTOR
3. EMITTER
TO-220C package

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	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℃	75	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.88	℃/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

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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= 0.8A			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}= 250V; V_{BE}= 0 V_{CE}=120V; V_{BE}= 0			5.0 0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			1.0	mA
h_{FE}	DC Current Gain	I_C= 1A; V_{CE}= 5V	60	70	120	
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 10V	10	30		MHz
t_f	Fall Time	I_C= 5A; I_{B1}= -I_{B2}= 0.8A			0.4	μs