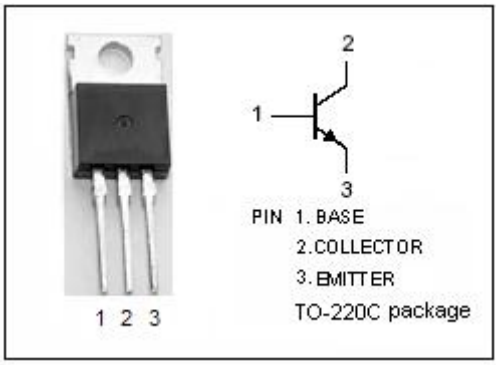
SPTECH Silicon NPN Power Transistor

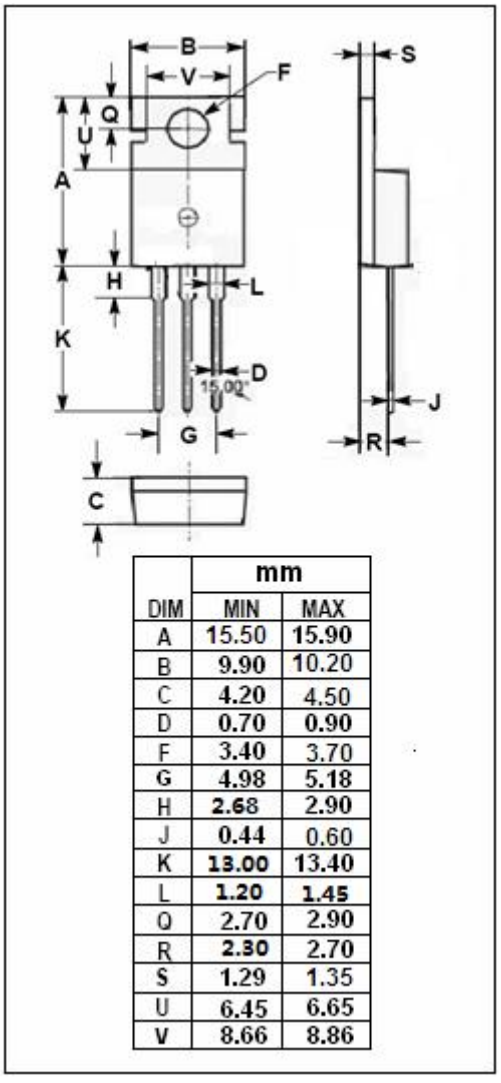


DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  :V_{CEO}= 60V(Min)
- DC Current Gain-
  : h_{FE}= 30(Min)@ (V_{CE}= 5V, I_C= 1A)
- High Collector Current
- High Collector Power Dissipation

APPLICATIONS

- TV Horizontal Deflection Output Application



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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ T_a=25℃	1.5	W
	Collector Power Dissipation @ T_C=25℃	40	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

SPTECH Silicon NPN Power Transistor

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B=0.4A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 4A; I_B=0.4A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 170V ; I_E= 0			10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			10	μA
h_{FE-1}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	30		150	
h_{FE-2}	DC Current Gain	I_C= 4A ; V_{CE}= 5V	20			
f_T	Current-Gain—Bandwidth Product	I_C= 500mA; V_{CE}= 5V		8		MHz