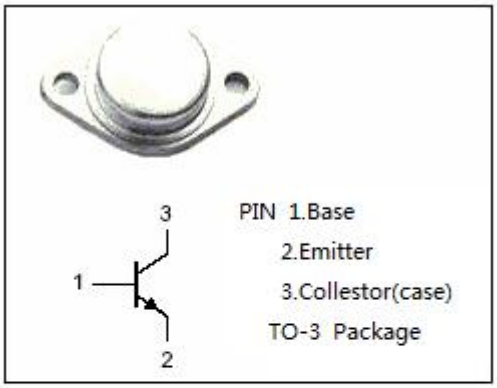
SPTECH Silicon NPN Power Transistor

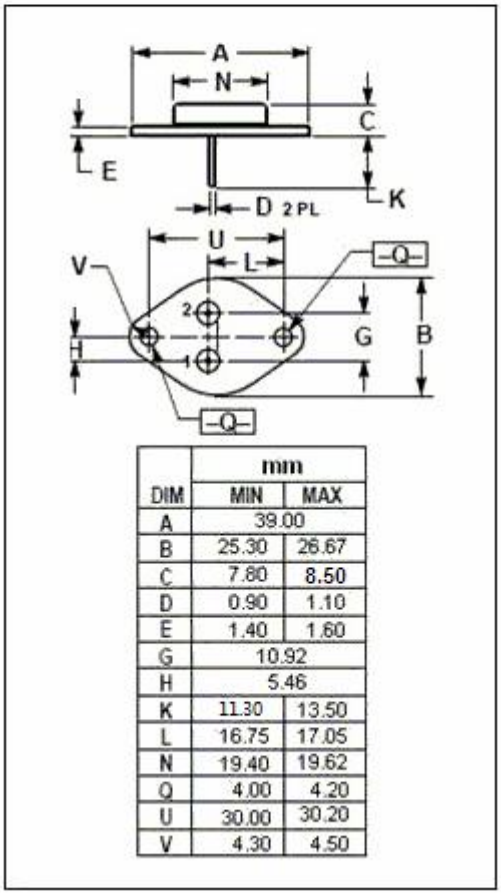


DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 60V(Min.)
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= 3.3V(Max.)@ I_C= 8A

APPLICATIONS

- Designed for horizontal deflection output stage of CTV receivers and high voltage,fast switching and industrial applications.



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

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak Repetitive	15	A
P_C	Collector Power Dissipation @ T_C=75℃	15	W
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
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 50mA; I_B= 0	60			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 1mA; I_E= 0	150			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 8A; I_B= 2.5A			3.3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 8A; I_B= 2.5A			2.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 120V; I_E= 0			10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			10	μA
h_{FE}	DC Current Gain	I_C= 2A; V_{CE}= 2V	40		90	
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 10V	0.1			MHz