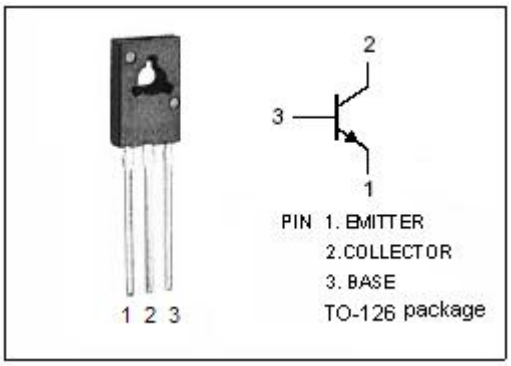
isc Silicon NPN Power Transistor — BUY49P

DESCRIPTION

- High Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 200V(Min)
- High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

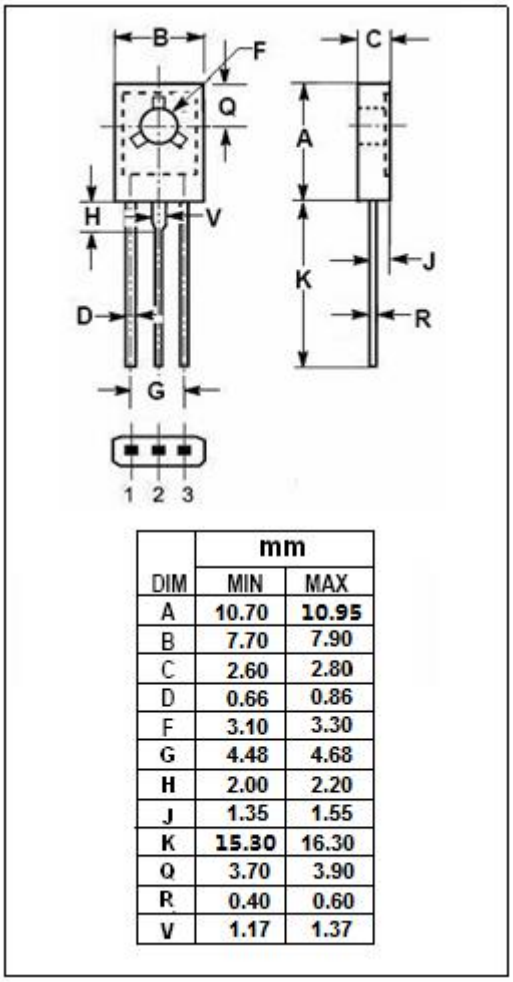
APPLICATIONS

- Designed for high-current switching applications.



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	250	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	3.0	A
I_{CM}	Collector Current-Peak	5.0	A
P_C	Collector Power Dissipation @T_C=25℃	15	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	MAX
A	10.70	10.95
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	15.30	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	8.33	℃/W

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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= 20mA; I_B= 0	200			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 0.1mA; I_E= 0	250			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 500mA; I_B= 50mA			0.2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 500mA; I_B= 50mA			1.1	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 200V; I_E= 0			0.1	μA
h_{FE-1}	DC Current Cain	I_C= 20mA; V_{CE}= 2V	30			
h_{FE-2}	DC Current Cain	I_C= 20mA; V_{CE}= 5V	40			
h_{FE-3}	DC Current Cain	I_C= 0.5mA; V_{CE}= 5V	40			