isc Silicon NPN Power Transistor — MJE340T

DESCRIPTION

- Collector–Emitter Sustaining Voltage–
  : $V_{CEO(SUS)}$ = 300 V(Min)
- DC Current Gain–
  : h_{FE} = 100(Min) @ I_C= 50mA
- Low Collector Saturation Voltage–
  : $V_{CE(sat)}$ = 1.0V(Max.)@ I_C= 50mA
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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

APPLICATIONS

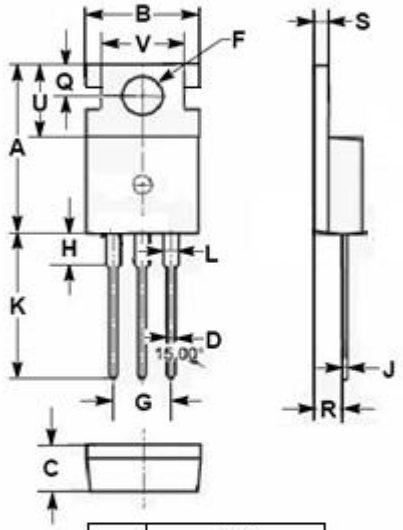
- Designed for high voltage and general purpose applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current-Continuous	0.5	A
P_C	Collector Power Dissipation T_C=25℃	20	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	6.25	℃/W



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	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	12.80	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	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 1.0mA; I_B= 0	300		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 1.0mA; I_E= 0	300		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1.0mA; I_C= 0	3		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 50mA ;I_B= 5mA		1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 300V; I_E= 0		0.1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 3V; I_C= 0		0.1	mA
h_{FE}	DC Current Gain	I_C= 50m A ; V_{CE}= 10V	100	240	