New Jersey Semi-Conductor Products, Inc.

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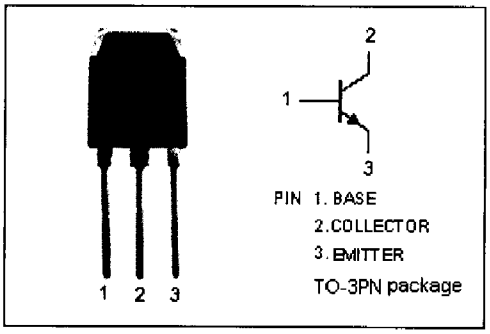
Silicon NPN Power Transistor — 2N6932

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 400(Min.)
- High Switching Speed

APPLICATIONS

- Off-line power supplies
- High-voltage inverters
- Switching regulators

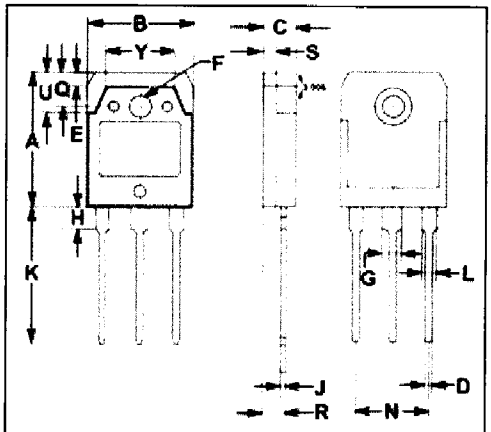


Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEV}	Collector-Emitter Voltage (V_{BE}= -1.5V)	650	V
V_{CEX}	Collector-Emitter Voltage	450	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak	15	A
I_B	Base Current-Continuous	5	A
I_{BM}	Base Current-peak	7	A
I_E	Emitter Current-Continuous	15	A
I_{EM}	Emitter Current-peak	22	A
P_C	Collector Power Dissipation @T_C=25℃	150	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	0.83	℃/W



DIM	mm MIN	MAX
A	19.90	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.10
H	3.20	3.40
J	0.595	0.605
K	20.50	20.70
L	1.90	2.10
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

Quality Semi-Conductors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 0.2A ; I_B= 0; L= 25mH	400		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 50mA; I_C= 0	8		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 2A I_C= 10A; I_B= 2A;T_C= 100℃		1.0 2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 10A; I_B= 2A I_C= 10A; I_B= 2A;T_C= 100℃		1.5 1.5	V
I_{CEV}	Collector Cutoff Current	V_{CE}= 650V; V_{BE}= -1.5V V_{CE}= 650V; V_{BE}= -1.5V;T_C=125℃		0.1 1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 8V; I_C= 0		2.0	mA
h_{FE}	DC Current Gain	I_C= 10A ; V_{CE}= 3V	8	35	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V, f_{test}= 1MHz	80	300	pF

Switching times-Resistive Load

t_d	Delay Time	I_C= 10A; I_{B1}=-I_{B2}= 2A; V_{CC}= 300V R_C= 30Ω ; V_{BB}= -5V, t_p= 30μs		0.1	μs
t_r	Rise Time			0.7	μs
t_s	Storage Time			2.5	μs
t_f	Fall Time			0.5	μs