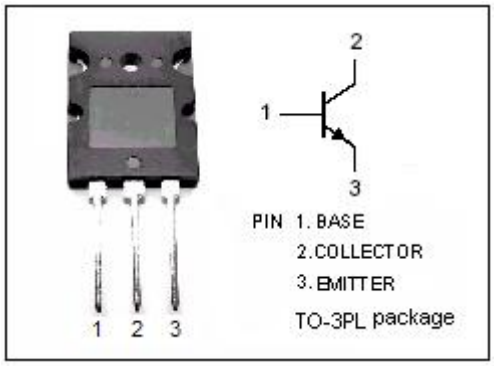
isc Silicon NPN Power Transistor — 2SC3994



DESCRIPTION

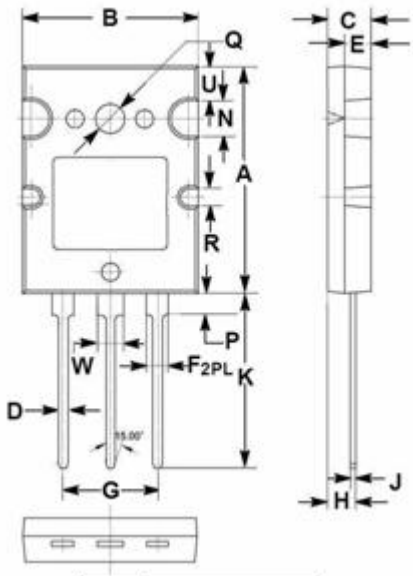
- High Switching Speed
- High Breakdown Voltage-
  : $V_{(BR)CBO}$= 1100V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for horizontal deflection output applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1100	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	25	A
I_{CM}	Collector Current-Pulse	60	A
P_C	Collector Power Dissipation @ T_C=25℃	300	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	25.50	26.50
B	19.80	20.20
C	4.50	5.50
D	0.90	1.10
E	2.80	3.20
F	2.40	2.60
G	10.80	11.00
H	3.10	3.30
J	0.50	0.70
K	20.00	21.00
N	3.90	4.50
P	2.40	2.60
Q	3.10	3.50
R	1.90	2.60
U	3.90	4.10
W	2.90	3.25

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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= 10mA; I_B= 0	800			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 12A; I_B=2.4A			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 12A; I_B=2.4A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 800V; 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= 1.6A; V_{CE}= 5V	10		40	
h_{FE-2}	DC Current Gain	I_C= 8A; V_{CE}= 5V	8			
t_{stg}	Storage Time	V_{CC}=400V,5I_{B1}=-2.5I_{B2}=I_C=20 A,R_L=20Ω			3.0	μs
t_f	Fall Time				0.3	μs

◆ **$h_{FE\ 1}$Classifications**

K	L	M
10-20	15-30	20-40

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