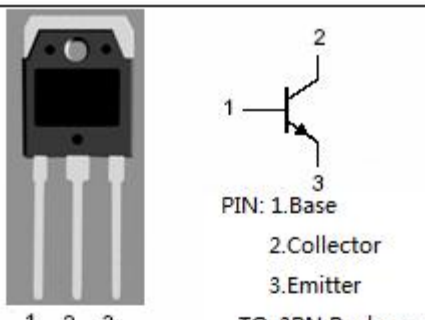
isc Silicon NPN Power Transistor — MJW21194

DESCRIPTION

- Total Harmonic Distortion Characterized
- High DC Current Gain –
  h_{FE} = 20-80 @ I C = 8 Adc
- Complement to Type MJW21193
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

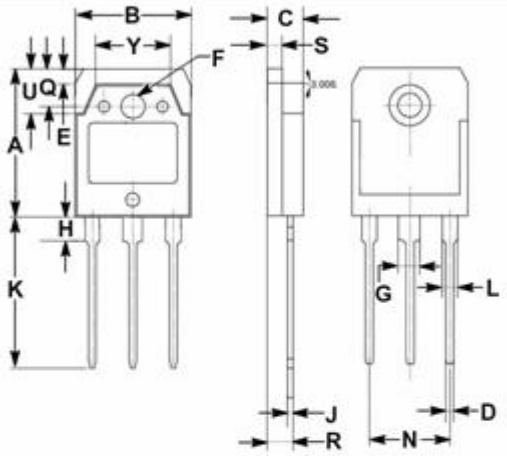
- Designed for high power audio output,disk head positioners and linear applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	250	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	16	A
I_{CM}	Collector Current-Pulse	30	A
I_B	Base Current-Continuous	5	A
P_C	Collector Power Dissipation @ T_C=25℃	200	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	0.7	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	40	℃/W



DIM	mm MIN	MAX
A	19.60	20.30
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	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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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= 10mA ; I_B= 0	250		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 8A; I_B= 0.8A		1.4	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 16A; I_B= 3.2A		4.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 8A; V_{CE}= 5V		2.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 400V; I_E= 0		100	μA
I_{CEO}	Collector Cutoff Current	V_{CE}= 200V; I_E= 0		100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0		100	μA
h_{FE-1}	DC Current Gain	I_C= 8A ; V_{CE}= 5V	20	80	
h_{FE-2}	DC Current Gain	I_C= 16A ; V_{CE}= 5V	8		