

Silicon PNP Power Transistor

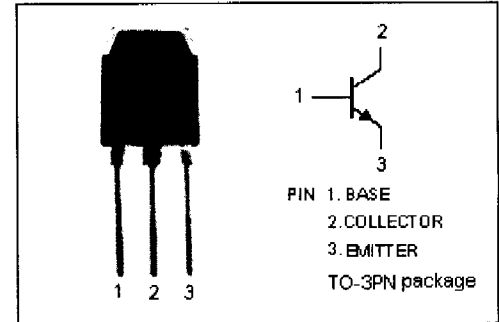
MJW21191

DESCRIPTION

- DC Current Gain Specified up to 8.0 Amperes at Temperature
- High SOA: 20 A, 18 V, 100 ms
- TO-3PN Package
- Complement to Type MJW21192

APPLICATIONS

- designed for power audio output, or high power drivers in audio amplifiers applications

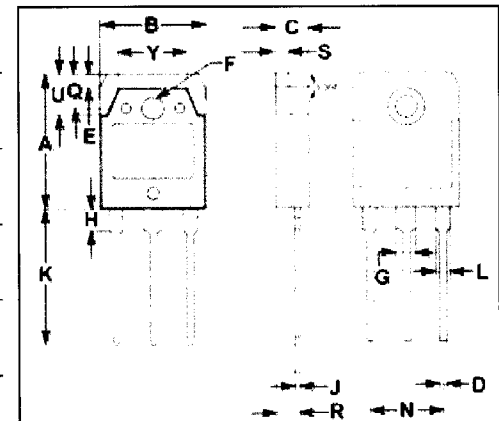


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	150	V
V _{CE0}	Collector-Emitter Voltage	150	V
V _{EB0}	Emitter-Base Voltage	5	V
I _C	Collector Current-Continuous	8	A
I _{CM}	Collector Current-Pulse	16	A
I _B	Base Current-Continuous	2	A
P _C	Collector Power Dissipation @ T _C =25°C	100	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

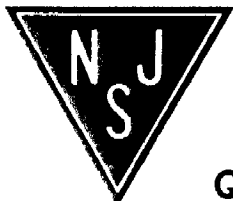
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.65	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	50	°C/W



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.38	15.42
C	4.75	4.85
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.98	3.02
H	3.20	3.40
J	0.595	0.605
K	19.95	20.25
L	1.98	2.02
N	10.89	10.91
Q	4.95	5.05
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

$T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=10\text{mA}; I_B=0$	150			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=4\text{A}; I_B=0.4\text{A}$			1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=8\text{A}; I_B=1.6\text{A}$			2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=4\text{A}; V_{CE}=2\text{V}$			2.0	V
I_{CES}	Collector Cutoff Current	$V_{CB}=250\text{V}; I_E=0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			10	μA
h_{FE-1}	DC Current Gain	$I_C=4\text{A}; V_{CE}=2\text{V}$	15		100	
h_{FE-2}	DC Current Gain	$I_C=8\text{A}; V_{CE}=2\text{V}$	5.0			
f_T	Current-Gain—Bandwidth Product	$I_E=1\text{A}; V_{CE}=10\text{V}$	4			MHz