

isc Silicon NPN Power Transistor
MJW21196
DESCRIPTION

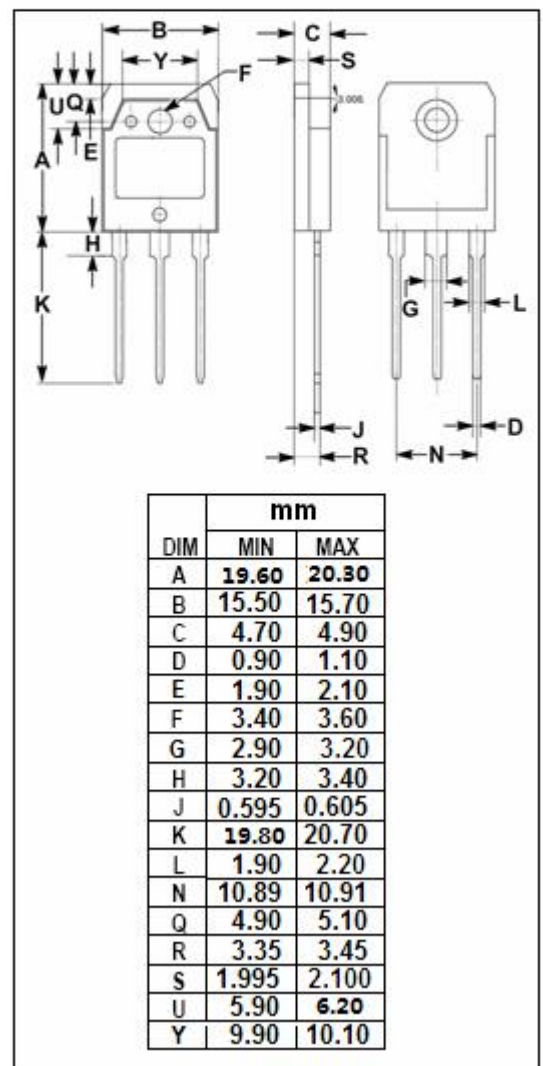
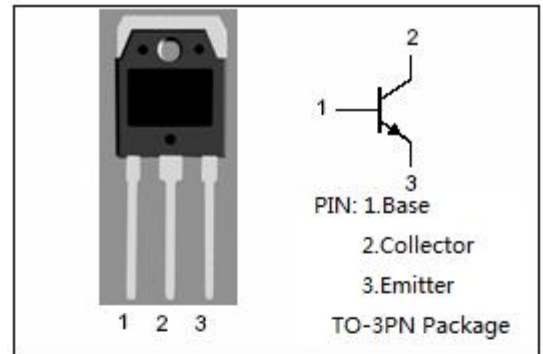
- Total harmonic distortion characterized
- High DC current gain
- Excellent gain linearity
- High SOA
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- The MJW21196 is specifically designed for high power audio output disk head positioners and linear applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

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_B	Base Current-Continuous	5.0	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	200	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-65~150	°C



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=50\text{mA}$; $I_B=0$	250			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=8.0\text{A}$; $I_B=0.8\text{A}$			1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=16\text{A}$; $I_B=3.2\text{A}$			3.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=8\text{A}$; $V_{CE}=5\text{V}$			2.0	V
I_{CEO}	Collector Cutoff Current	$V_{CE}=200\text{V}$; $I_E=0$			100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}$; $I_C=0$			50	μA
h_{FE-1}	DC Current Gain	$I_C=8\text{A}$; $V_{CE}=5\text{V}$	20		80	
h_{FE-2}	DC Current Gain	$I_C=16\text{A}$; $V_{CE}=5\text{V}$	8			
f_T	Current-Gain—Bandwidth Product	$I_C=1\text{A}$; $V_{CE}=10\text{V}$	4			MHz

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