

**isc Silicon NPN Power Transistor**
**MJW21196**
**DESCRIPTION**

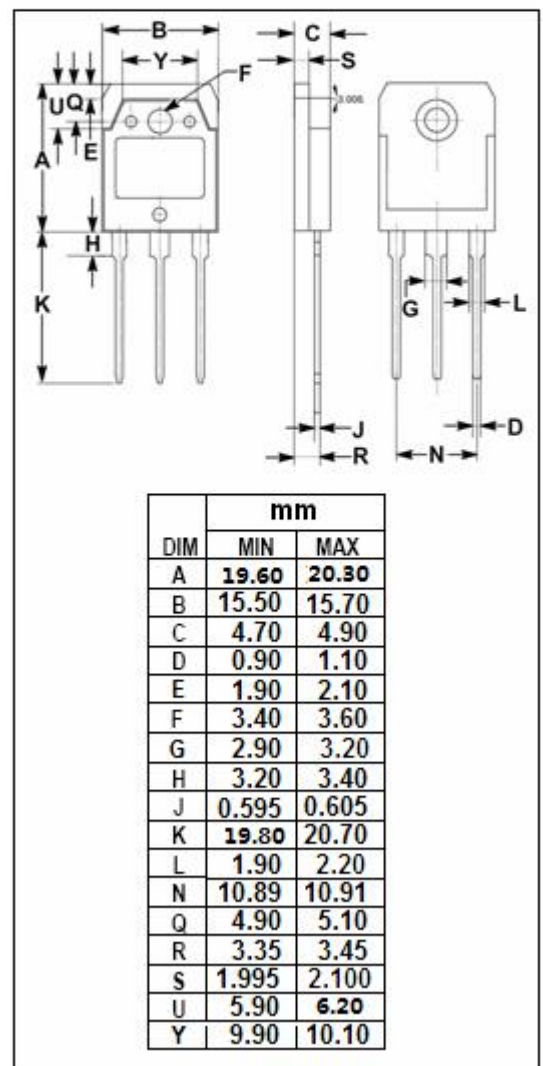
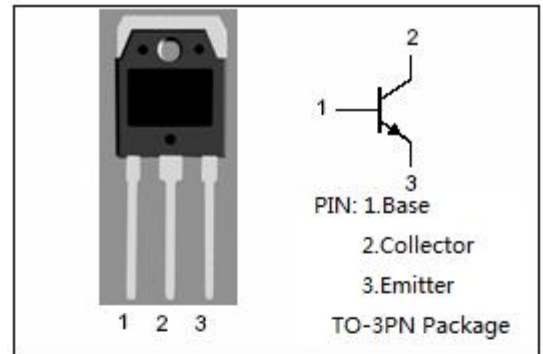
- Total harmonic distortion characterized
- High DC current gain
- Excellent gain linearity
- High SOA
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**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	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ\text{C}$



## isc Silicon NPN Power Transistor

MJW21196

## 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	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}$ ; $I_C=0$			50	$\mu\text{A}$
$h_{FE-1}$	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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