

isc Silicon PNP Power Transistor

MJW21193

DESCRIPTION

- Total Harmonic Distortion Characterized
- High DC Current Gain –
 $h_{FE} = 20 \text{ Min @ } I_C = -8 \text{ Adc}$
- Complement to Type MJW21194
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

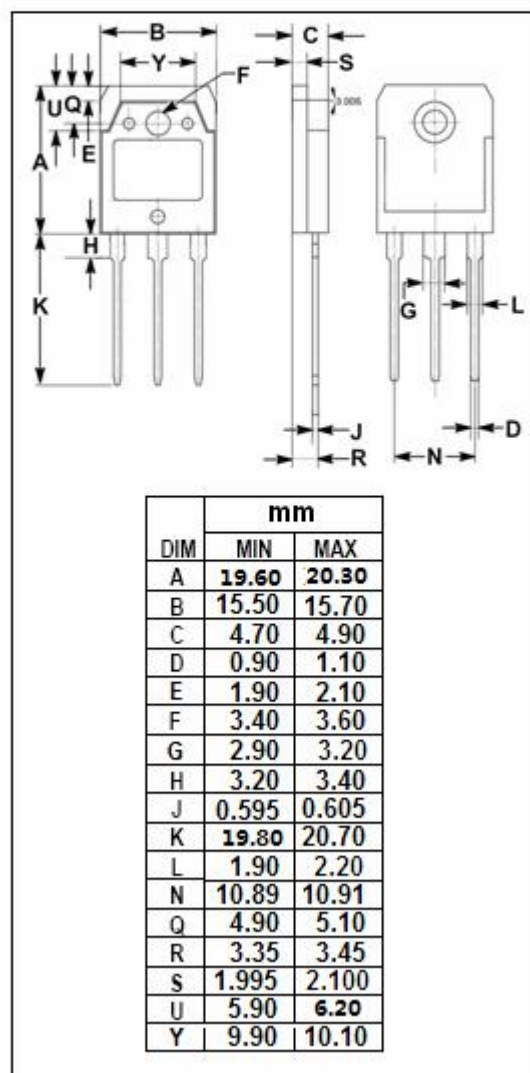
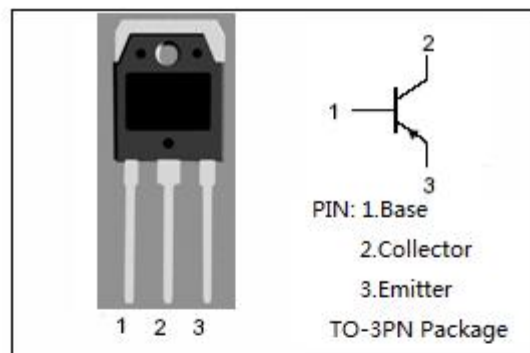
- Designed for high power audio output, disk head positioners and linear applications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

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_{CM}	Collector Current-Pulse	-30	A
I_B	Base Current-Continuous	-5	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	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.7	$^\circ\text{C/W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	40	$^\circ\text{C/W}$



isc Silicon PNP Power Transistor**MJW21193****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	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	μ A
I _{CEO}	Collector Cutoff Current	V _{CE} = -200V; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-100	μ A
h _{FE-1}	DC Current Gain	I _C = -8A ; V _{CE} = -5V	20			
h _{FE-2}	DC Current Gain	I _C = -16A ; V _{CE} = -5V	8			

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