

SPTECH Silicon PNP Power Transistor

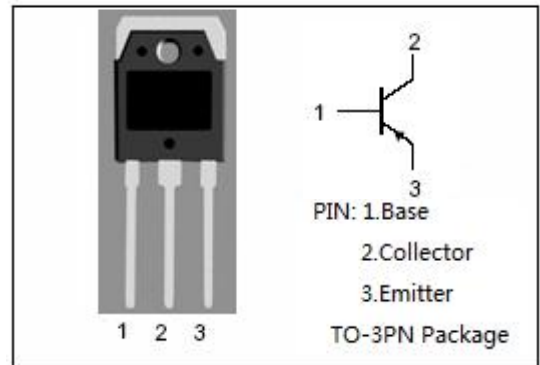
MJW1302A

DESCRIPTION

- High DC current amplifier rate
 h_{FE} : 50-200@ $V_{CE}=5V, I_C=1A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High power audio, disk head positioners and other linear applications.

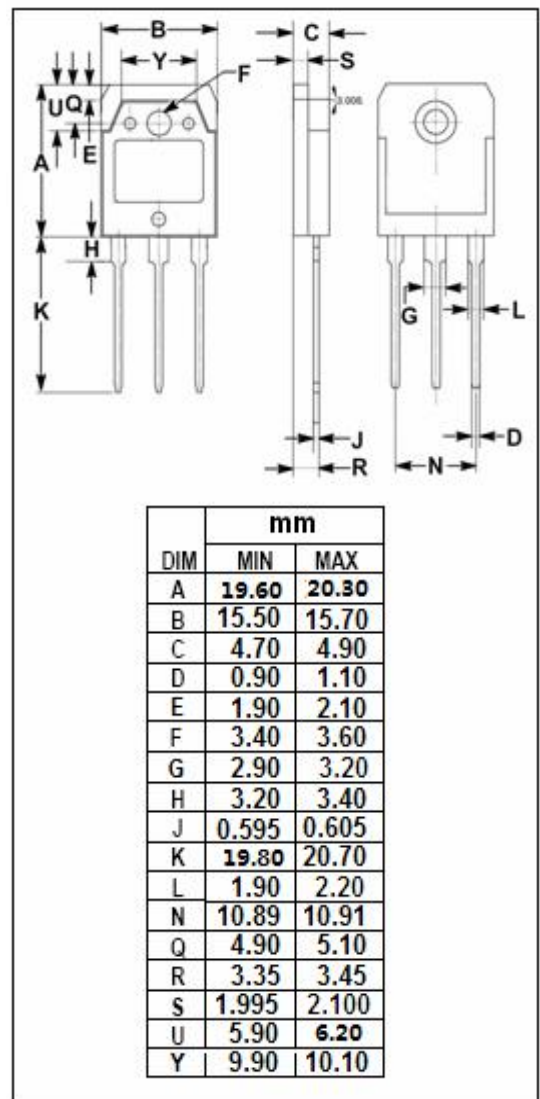


ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-230	V
V_{CEO}	Collector-Emitter Voltage	-230	V
V_{CEX}	Collector-Emitter Voltage $V_{EB}=5V$	-230	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-15	A
I_{CM}	Collector Current-Peak	-25	A
I_B	Base Current-Continuous	-1.5	A
P_T	Total Power Dissipation @ $T_C=25^{\circ}C$	200	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	0.63	$^{\circ}C/W$



ELECTRICAL CHARACTERISTICS**T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -100mA; I _B = 0	-230			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -10A; I _B = -1A			-0.6	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -8A; V _{CE} = -5V			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -230V			-50	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = -230V			-50	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V			-5	mA
h _{FE-1}	DC Current Gain	I _C = -0.1A; V _{CE} = -5V	50		200	
h _{FE-2}	DC Current Gain	I _C = -1A; V _{CE} = -5V	50		200	
h _{FE-3}	DC Current Gain	I _C = -3A; V _{CE} = -5V	50		200	
h _{FE-4}	DC Current Gain	I _C = -5A; V _{CE} = -5V	45			
h _{FE-5}	DC Current Gain	I _C = -8A; V _{CE} = -5V	15			