

SPTECH Product Specification

SPTECH Silicon PNP Power Transistor

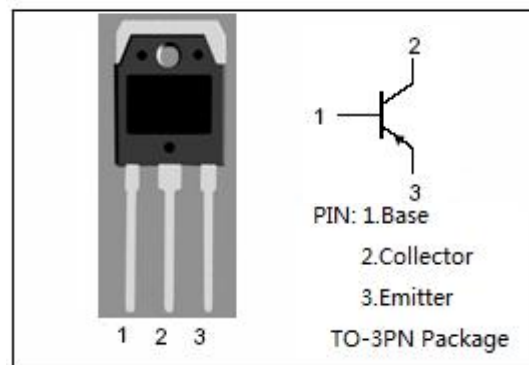
MJW0302A

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.

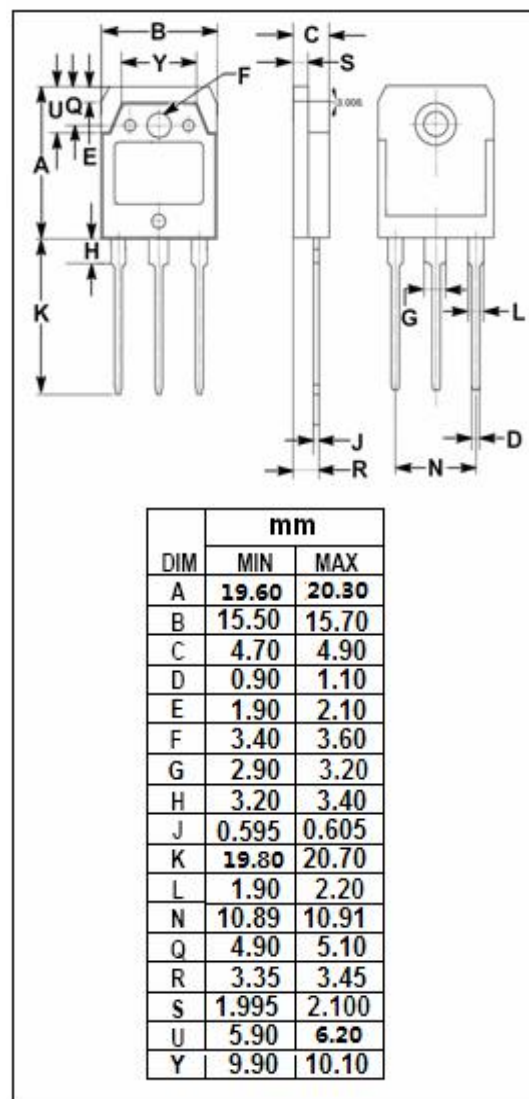


ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-250	V
V_{CEO}	Collector-Emitter Voltage	-250	V
V_{CEX}	Collector-Emitter Voltage $V_{EB} = 5V$	-250	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-15	A
I_{CM}	Collector Current-Peak	-30	A
I_B	Base Current-Continuous	-1.5	A
P_T	Total Power Dissipation @ $T_C=25^{\circ}\text{C}$	150	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	0.63	$^{\circ}\text{C/W}$



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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE0(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -100mA; I _B = 0	-250			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} = -250V			-50	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = -250V			-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	75		150	
h _{FE-2}	DC Current Gain	I _C = -1A; V _{CE} = -5V	75		150	
h _{FE-3}	DC Current Gain	I _C = -3A; V _{CE} = -5V	75		150	
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			