

SPTECH Silicon NPN Power Transistor

NJW0281G

DESCRIPTION

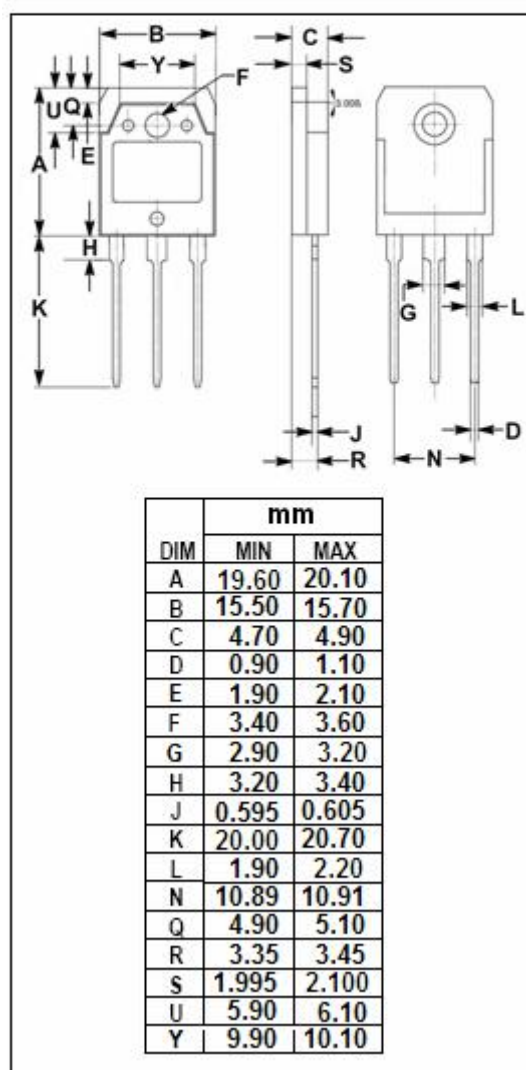
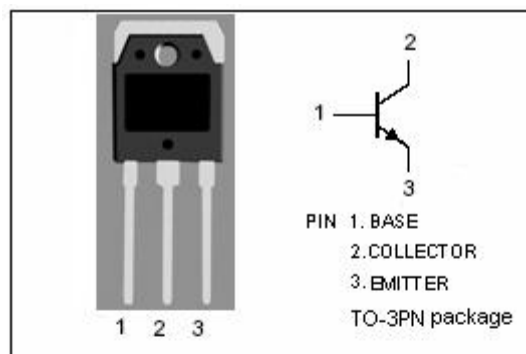
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO}=250V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type NJW0302G

APPLICATIONS

- Designed for high fidelity audio amplifier 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_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	15	A
I_B	Base Current-Continuous	1.5	A
P_C	Collector 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	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS**T_C=25℃ unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 30mA ; I _B = 0	250			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5.0A; I _B = 0.5A			1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 5.0 A, V _{CE} = 5.0 V			1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 250V ; I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			5	μ A
h _{FE}	DC Current Gain	I _C = 0.5A ; V _{CE} = 5V	75		150	
h _{FE1}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	75		150	
h _{FE2}	DC Current Gain	I _C = 3A ; V _{CE} = 5V	75		150	
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V; f _{test} = 1.0MHz			700	pF
f _T	Current-Gain—Bandwidth Product	I _C =-1A ; V _{CE} = 5V ; f _{test} = 1.0MHz	20			MHz