

SPTECH Silicon PNP Power Transistor

2N6491

DESCRIPTION

- DC Current Gain Specified to 15 Amperes-
: $h_{FE} = 20-150 @ I_C = -5.0 \text{ A dc}$
= $5.0 (\text{Min}) @ I_C = -5 \text{ A dc}$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = -80 \text{ V dc (Min)}$
- Complement to Type 2N6488

APPLICATIONS

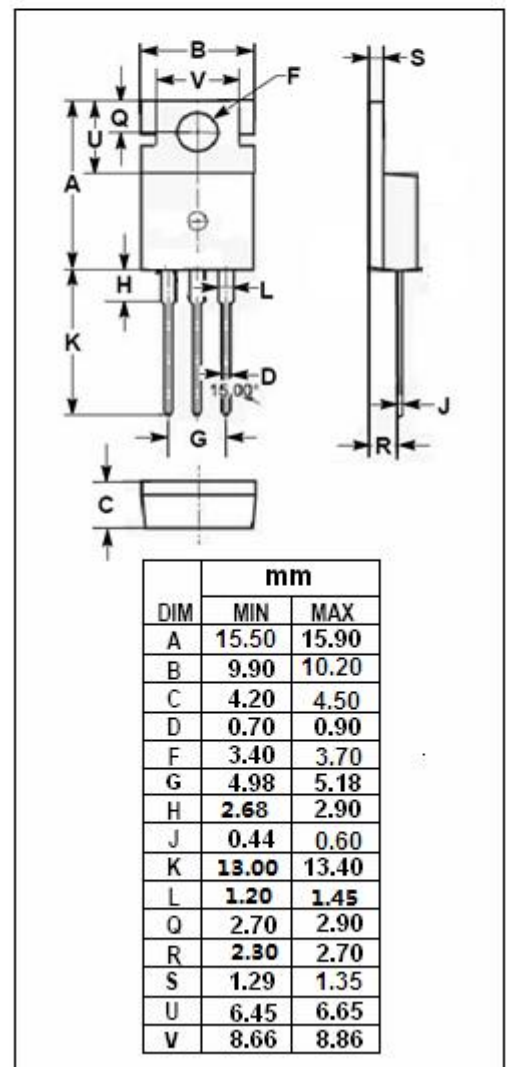
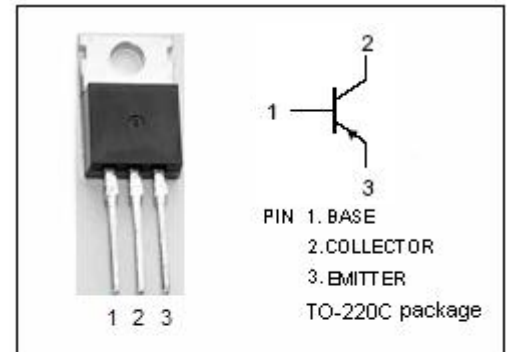
- Designed for use in general-purpose amplifier and switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-90	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-15	A
I_B	Base Current	-5	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	75	W
	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1.8	
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	1.67	$^\circ\text{C/W}$
$R_{th j-a}$	Thermal Resistance, Junction to Ambient	70	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -50\text{mA}$; $I_B = 0$	-80		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -5\text{A}$; $I_B = -0.5\text{A}$		-1.3	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -15\text{A}$; $I_B = -5.0\text{A}$		-3.5	V
$V_{BE(on)-1}$	Base-Emitter On Voltage	$I_C = -5\text{A}$; $V_{CE} = -4\text{V}$		-1.3	V
$V_{BE(on)-2}$	Base-Emitter On Voltage	$I_C = -15\text{A}$; $V_{CE} = -4\text{V}$		-3.5	V
I_{CEO}	Collector Cutoff Current	$V_{CE} = -40\text{V}$; $I_B = 0$		-1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}$; $I_C = 0$		-1.0	mA
h_{FE-1}	DC Current Gain	$I_C = -5\text{A}$; $V_{CE} = -4\text{V}$	20	150	
h_{FE-2}	DC Current Gain	$I_C = -15\text{A}$; $V_{CE} = -4\text{V}$	5		
f_T	Current-Gain—Bandwidth Product	$I_C = -1.0\text{A}$; $V_{CE} = -4\text{V}$; $f_{\text{test}} = 1.0\text{MHz}$	5.0		MHz