

isc Silicon NPN Power Transistor
2N6488
DESCRIPTION

- DC Current Gain Specified to 15 Amperes-
: $h_{FE} = 20-150 @ I_C = 5.0A$
=5.0(Min)@ $I_C = 15A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 80Vdc(Min)$
- Complement to Type 2N6491

APPLICATIONS

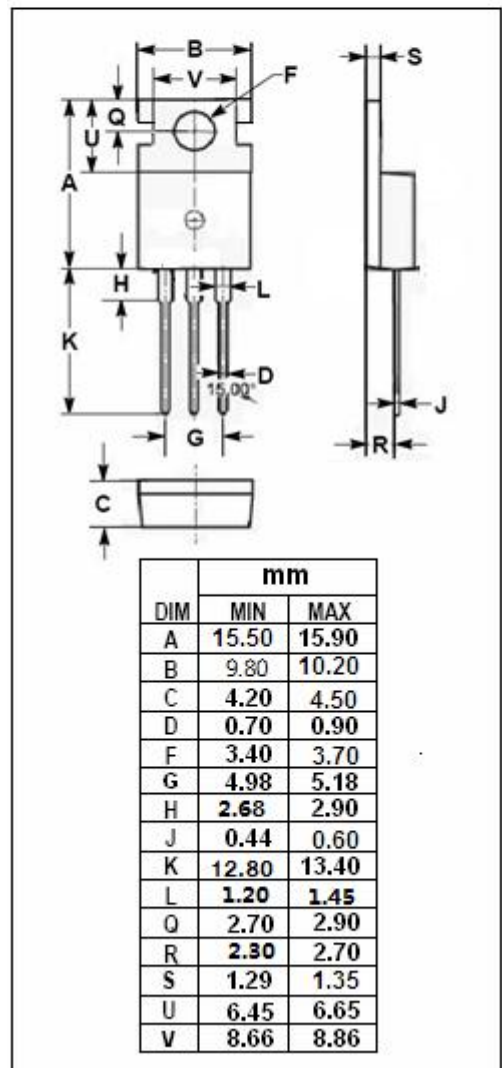
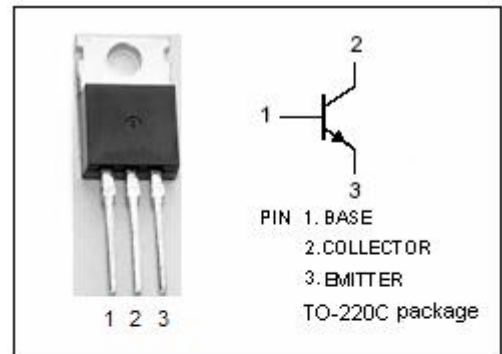
- Designed for use in general-purpose amplifier and switching applications

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

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 @ $T_C = 25^\circ C$	75	W
	Collector Power Dissipation @ $T_a = 25^\circ C$	1.8	
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	1.67	$^\circ C/W$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	70	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CE(SUS)}	Collector-Emitter Sustaining Voltage	I _C =50mA ; I _B =0	80		V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C =5A; I _B =0.5A		1.3	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C =15A; I _B =5.0A		3.5	V
V _{BE(on)-1}	Base-Emitter On Voltage	I _C =5A ; V _{CE} =4V		1.3	V
V _{BE(on)-2}	Base-Emitter On Voltage	I _C =15A ; V _{CE} =4V		3.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} =40V; I _B =0		1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} =5V; I _C =0		1.0	mA
h _{FE-1}	DC Current Gain	I _C =5A ; V _{CE} =4V	20	150	
h _{FE-2}	DC Current Gain	I _C =15A ; V _{CE} =4V	5		
f _T	Current-Gain—Bandwidth Product	I _C =1.0A ; V _{CE} =4V, f _{test} =1.0MHz	5.0		MHz

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