

isc Silicon NPN Power Transistor
2N6131
DESCRIPTION

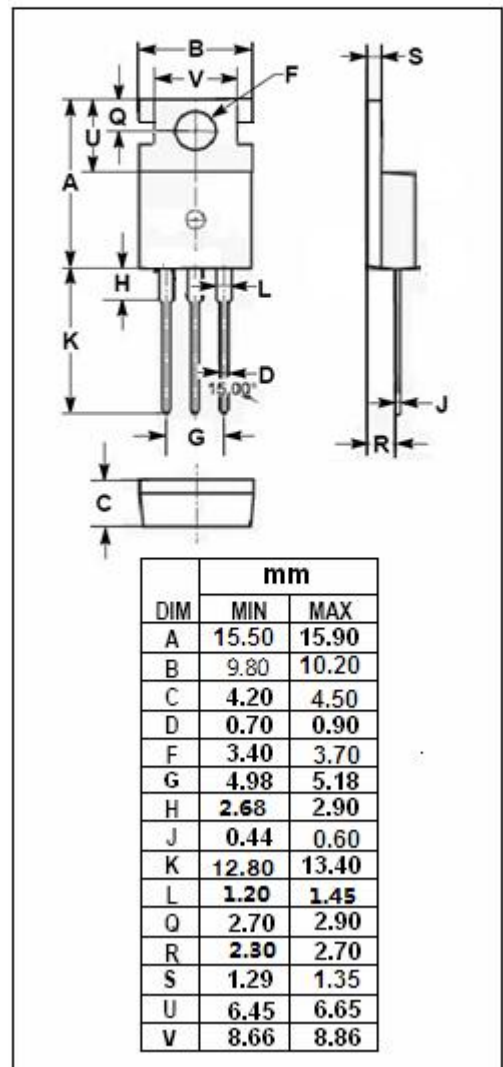
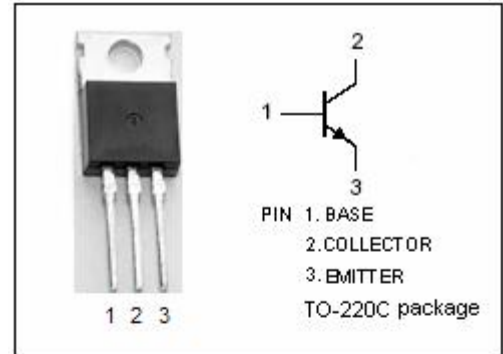
- DC Current Gain-
: $h_{FE} = 20-100 @ I_C = 2.5A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 80V(\text{Min})$
- Complement to Type 2N6134
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in power amplifier and switching circuits applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	7	A
I_B	Base Current	2	A
P_C	Collector Power Dissipation $T_C=25^\circ\text{C}$	50	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2N6131****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 30mA; I _B = 0	80		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 7A; I _B = 1.4A		1.4	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 7A; V _{CE} = 4V		3.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 80V; I _E = 0		0.1	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 80V; 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 = 2.5A ; V _{CE} = 4V	20	100	
h _{FE-2}	DC Current Gain	I _C = 7A ; V _{CE} = 4V	5		
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A ; V _{CE} = 4V	2.5		MHz

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