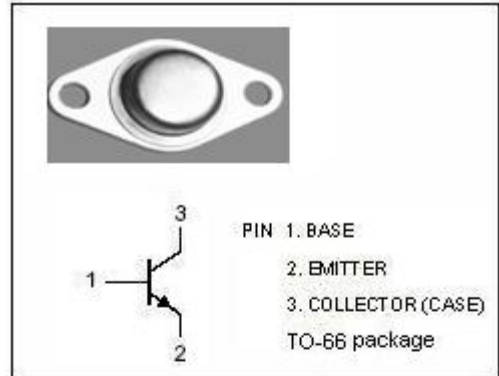


isc Silicon NPN Power Transistor
2SC1113
DESCRIPTION

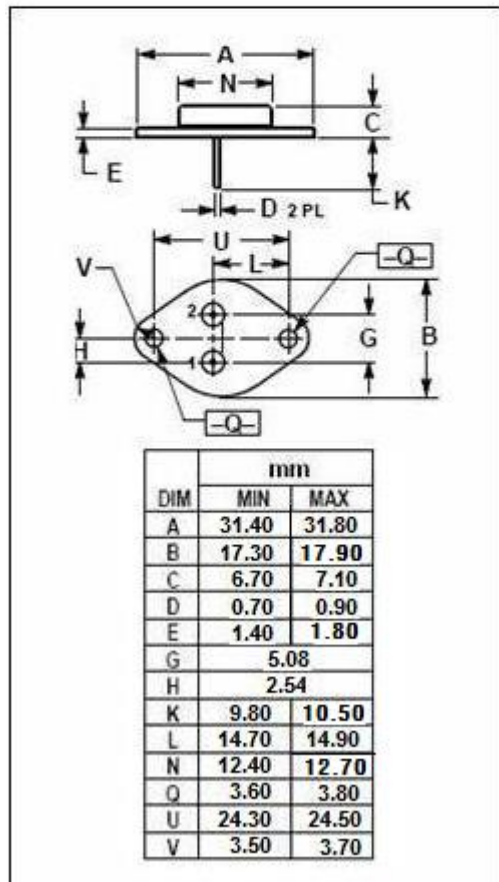
- High Current Capacity
- Wide area of safe operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

- Designed for use in audio frequency power amplifier applications


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	120	V
V _{CEO}	Collector-Emitter Voltage	100	V
V _{EBO}	Emitter-Base Voltage	5	V
I _c	Collector Current-Continuous	6.0	A
P _c	Collector Power Dissipation @ T _c =25°C	40	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3.125	°C/W

isc Silicon NPN Power Transistor

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A		1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A		1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 120V; I _B = 0		0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C =0		0.1	mA
h _{FE}	DC Current Gain	I _C = 5A; V _{CE} = 4V	30		
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 12V, f _{test} = 1.0MHz	10		MHz

NOTICE:

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