

isc Silicon NPN Power Transistor
2N6322
DESCRIPTION

- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 200V(\text{Min})$
- High Current Capability
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

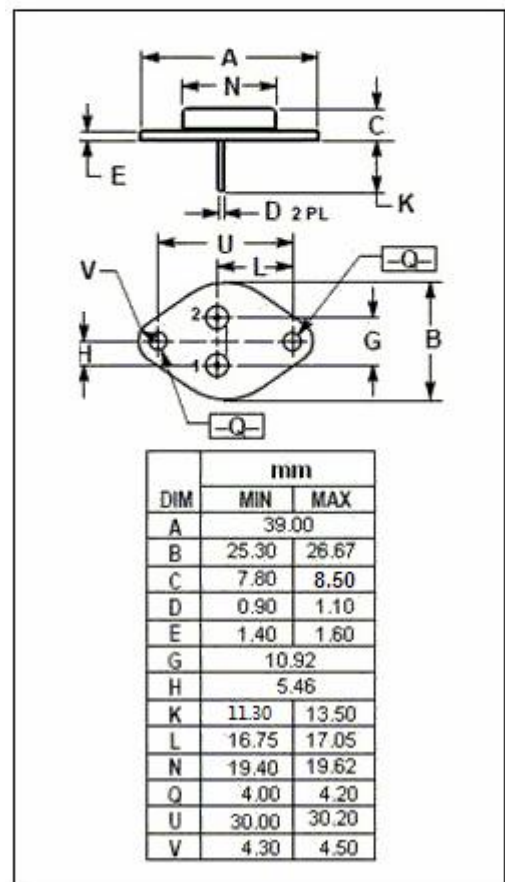
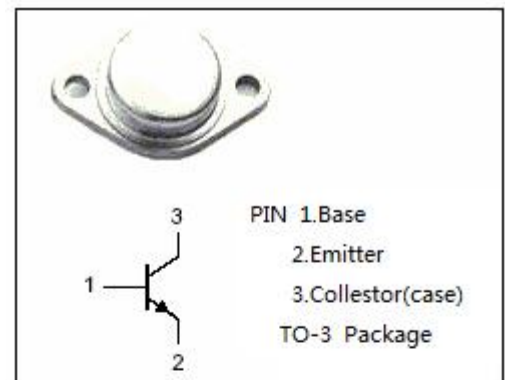
- Designed for power amplifier and high-speed switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base voltage	5	V
I_C	Collector Current-Continuous	30	A
I_B	Base Current-Continuous	10	A
P_C	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	200	W
T_J	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{th-j-c}	Thermal Resistance, Junction to Case	0.5	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _c = 30mA ; I _B = 0	200			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _c = 20A; I _B = 2A			1.5	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _c = 30A; I _B = 6A			3.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _c = 30A ; V _{CE} = 5V			2.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 300V ; I _E = 0			2.0	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 200V ; I _B = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			0.5	mA
h _{FE-1}	DC Current Gain	I _c = 5A ; V _{CE} = 5V	40		150	
h _{FE-2}	DC Current Gain	I _c = 20A ; V _{CE} = 5V	12			
h _{FE-3}	DC Current Gain	I _c = 30A ; V _{CE} = 5V	6			
f _T	Current-Gain—Bandwidth Product	I _c =1A ; V _{CE} = 10V	10			MHz

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