

isc Silicon NPN Power Transistor**2N3772J****DESCRIPTION**

- J:High DC Current Gain- h_{FE} :100-150@ $I_C = 10A$
- Low Saturation Voltage-
: $V_{CE(sat)} = 1.4V(Max)$ @ $I_C = 10A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

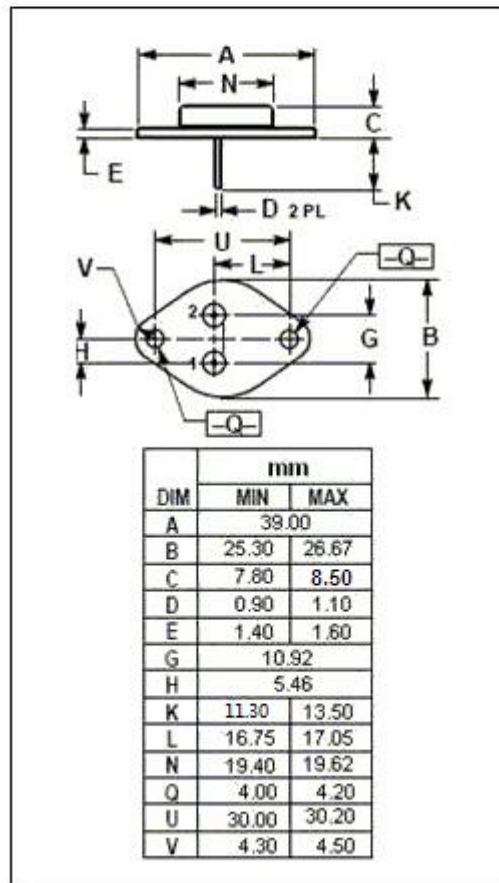
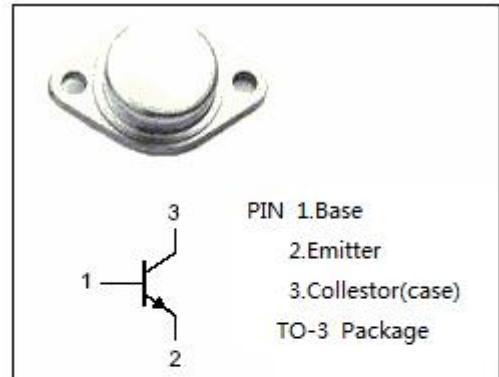
- Designed for linear amplifiers, series pass regulators, and inductive switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	20	A
I_{CM}	Collector Current-Peak	30	A
I_B	Base Current-Continuous	5	A
P_C	Collector Power Dissipation @ $T_c=25^\circ C$	150	W
T_J	Junction Temperature	200	$^\circ C$
T_{stg}	Storage Temperature	-65~200	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance,Junction to Case	1.17	$^\circ C/W$



isc Silicon NPN Power Transistor**2N3772J****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B = 0	60		V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 1A		1.4	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 20A; I _B = 4A		4.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 10A ; V _{CE} = 4V		2.2	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 60V; I _B = 0		10	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = 100V; I _E = 0		5.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C =0		5.0	mA
h _{FE}	DC Current Gain	I _C = 10A ; V _{CE} = 4V	100	150	
f _T	Current-Gain—Bandwidth Product	I _C = 1A ; V _{CE} = 4V ; f _{test} = 50kHz	0.2		MHz

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