

isc Silicon PNP Power Transistor

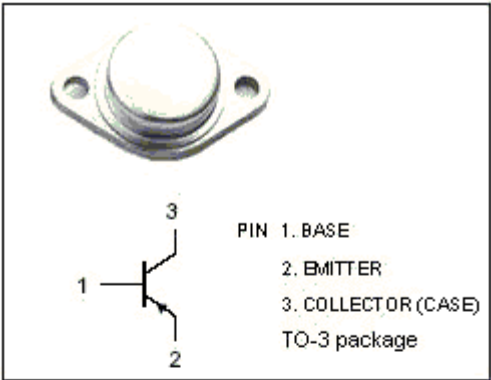
MJ450

DESCRIPTION

- Low Saturation Voltage-
: $V_{CE(sat)} \approx -1V @ I_C = -10A$
- DC Current Gain-
: $h_{FE} = 20(\text{Min}) @ I_C = -10A$

APPLICATIONS

- Designed for high-current switching and general purpose amplifier applications.

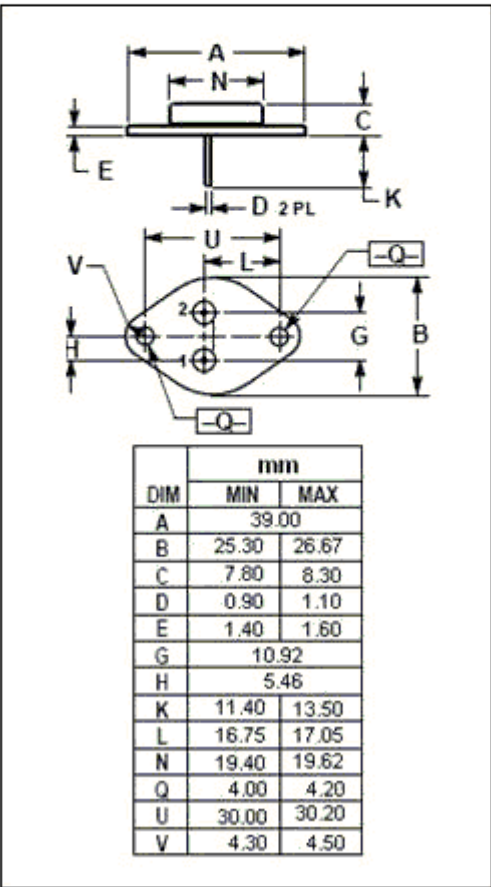


ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-30	A
I_B	Base Current-Continuous	-5	A
P_C	Collector Power Dissipation@ $T_C = 25^\circ\text{C}$	150	W
T_J	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

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



isc Silicon PNP Power Transistor**MJ450****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=-200\text{mA}$; $I_B=0$	-40			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=-10\text{A}$; $I_B=-1\text{A}$			-1	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=-10\text{A}$; $I_B=-1\text{A}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CE}=-40\text{V}$; $I_E=0$			-1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=-5\text{V}$; $I_C=0$			-10	mA
h_{FE}	DC Current Gain	$I_C=-10\text{A}$; $V_{CE}=-2\text{V}$	20			
f_T	Current Gain-Bandwidth Product	$I_C=-1\text{A}$; $V_{CE}=-10\text{V}$; $f_{test}=1\text{MHz}$	2			