

isc Silicon PNP Power Transistor**MJ3738****DESCRIPTION**

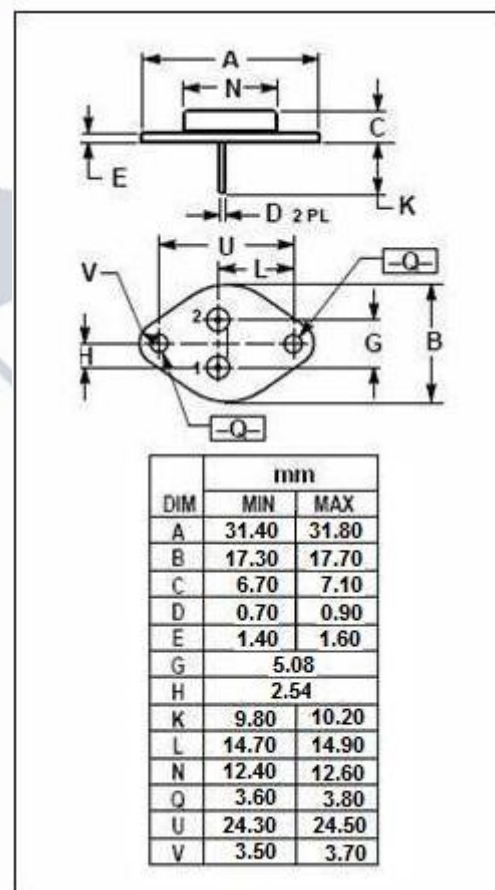
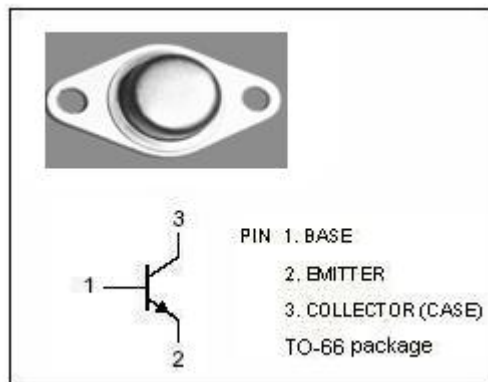
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -225V(\text{Min})$
- High Switching Speed

APPLICATIONS

- Designed for high voltage switching and amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-250	V
V_{CEO}	Collector-Emitter Voltage	-225	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-0.5	A
P_D	Total Power Dissipation@ $T_C=25^\circ\text{C}$	20	W
T_J	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~200	$^\circ\text{C}$



isc Silicon PNP Power Transistor**MJ3738****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}$; $I_B = 0$	-225		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -0.1\text{A}$; $I_B = -10\text{mA}$		-1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -0.1\text{A}$; $I_B = -10\text{mA}$		-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -250\text{V}$; $I_E = 0$		-0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5\text{V}$; $I_C = 0$		-0.1	mA
h_{FE}	DC Current Gain	$I_C = -0.1\text{A}$; $V_{CE} = -10\text{V}$	40	200	
f_T	Current-Gain—Bandwidth Product	$I_C = -0.1\text{A}$; $V_{CE} = -10\text{V}$	10		MHz