

DESCRIPTION

- High Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 300V(\text{Min.})$
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 0.8 V(\text{Max}) @ I_C = 1A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

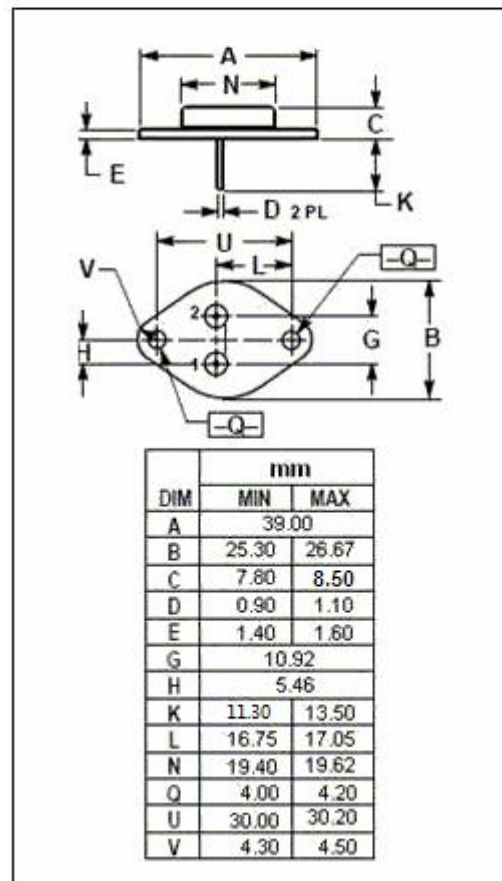
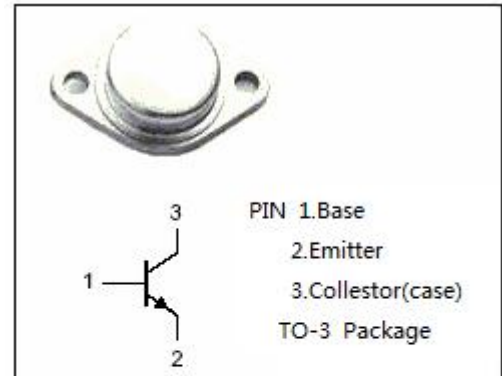
- Designed for medium to high voltage inverters, converters, regulators and switching circuits.

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	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	5	A
I_B	Base Current	10	A
P_C	Collector Power Dissipation@ $T_c = 25^\circ\text{C}$	100	W
T_J, T_{stg}	Operating and Storage Junction Temperature Range	-65~+200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.75	$^\circ\text{C/W}$



ELECTRICAL CHARACTERISTICS

$T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEQ(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=100\text{mA}$; $I_B=0$	300		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 1\text{A}$; $I_B= 0.1\text{A}$		0.8	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 1\text{A}$; $I_B= 0.1\text{A}$		1.2	V
I_{CEO}	Collector Cutoff Current	$V_{CE}= 300\text{V}$; $I_B=0$		0.25	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 5\text{V}$; $I_C=0$		5.0	mA
h_{FE-1}	DC Current Gain	$I_C= 1\text{A}$; $V_{CE}= 5\text{V}$	30	90	
h_{FE-2}	DC Current Gain	$I_C= 2.5\text{A}$; $V_{CE}= 5\text{V}$	10		