

isc Silicon NPN Power Transistor**2N3232****DESCRIPTION**

- Excellent Safe Operating Area
- DC Current Gain- $h_{FE} = 18-55 @ I_C = 3A$
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 2.5V(Max) @ I_C = 3A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 60V(Min)$

APPLICATIONS

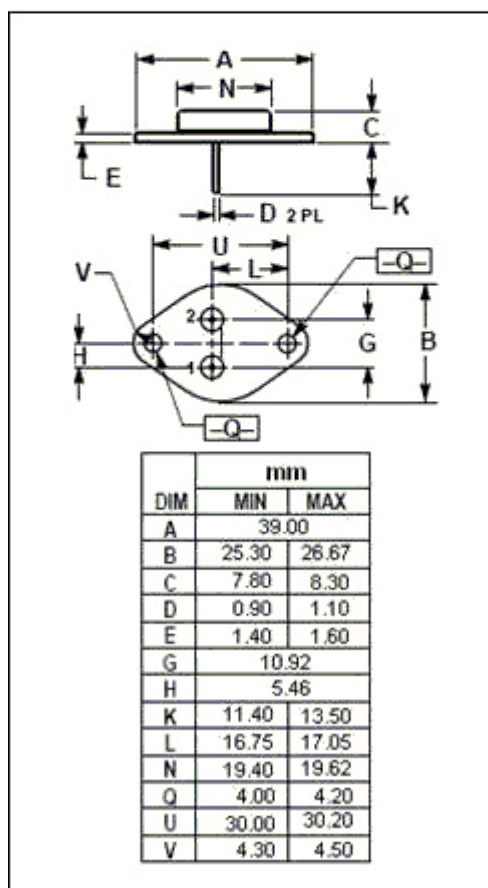
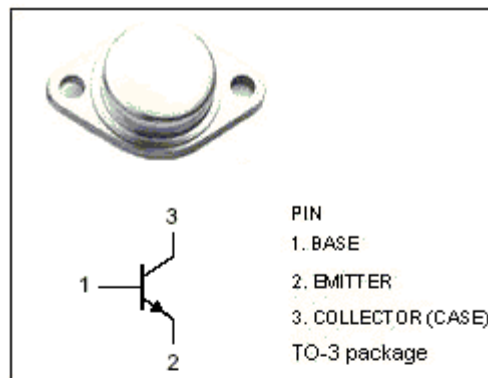
- Designed for general purpose power switch and amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	7.5	A
P_C	Collector Power Dissipation@ $T_C = 25^\circ C$	117	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	1.5	$^\circ C/W$



isc Silicon NPN Power Transistor**2N3232****ELECTRICAL CHARACTERISTICS** **$T_C=25^{\circ}\text{C}$ unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = 200\text{mA}$; $I_B = 0$	60		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 3\text{A}$; $I_B = 0.2\text{A}$		2.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = 3\text{A}$; $V_{CE} = 10\text{V}$		3.5	V
I_{CEV}	Collector Cutoff Current	$V_{CE} = 60\text{V}$; $V_{BE(off)} = 1.5\text{V}$		1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 7.0\text{V}$; $I_C = 0$		5.0	mA
h_{FE}	DC Current Gain	$I_C = 3\text{A}$; $V_{CE} = 10\text{V}$	18	55	
f_T	Current Gain-Bandwidth Product	$I_C = 0.5\text{A}$; $V_{CE} = 4\text{V}$; $f = 1.0\text{MHz}$	1.0		MHz