

isc Silicon NPN Power Transistor
2N4231
DESCRIPTION

- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

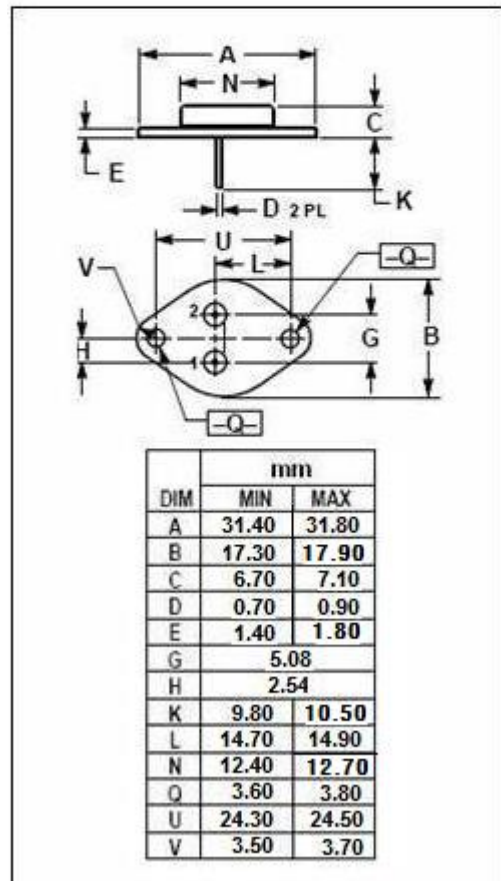
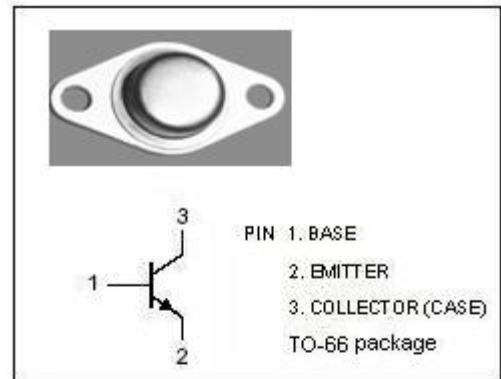
- Designed for general-purpose power amplifier and switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	40	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current-Continuous	5	A
P _C	Collector Power Dissipation@T _C =25°C	35	W
T _J	Junction Temperature	-65~200	°C
T _{stg}	Storage Temperature	-65~200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	5.7	°C/W



isc Silicon NPN Power Transistor**2N4231****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}^*$	Collector-Emitter Sustaining Voltage	$I_C=100\text{mA}; I_B=0$	40		V
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$		0.5	mA
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=1.5\text{A}; I_B=0.15\text{A}$		0.7	V
$V_{BE(ON)}$	Base-Emitter On Voltage	$I_C=1.5\text{A}; V_{CE}=2\text{V}$		1.4	V
h_{FE-1}^*	DC Current Gain	$I_C=1.5\text{A}; V_{CE}=2\text{V}$	25	100	
h_{FE-2}^*	DC Current Gain	$I_C=3\text{A}; V_{CE}=2\text{V}$	10		

*:Pulse test:Pulse width=300us,duty cycle \leq 2%**NOTICE:**

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