

**isc Silicon NPN Power Transistor**

**2N1470**

**DESCRIPTION**

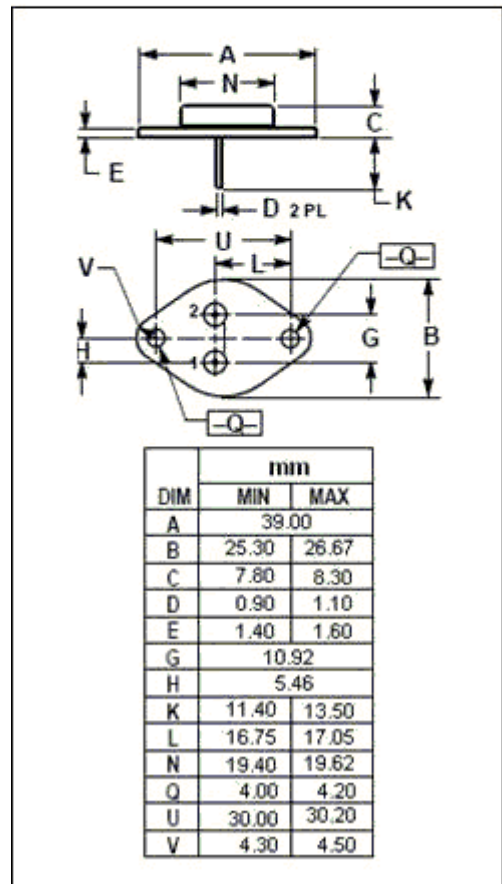
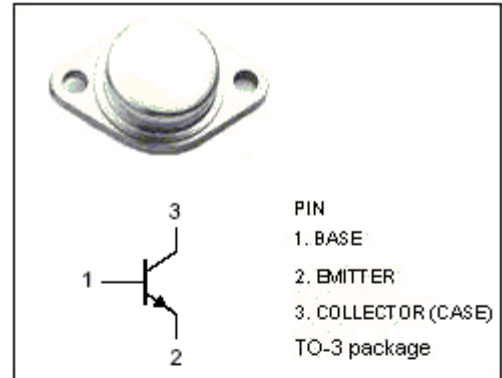
- Excellent Safe Operating Area
- Collector-Emitter Saturation Voltage-  
:  $V_{CE(sat)} = 1.0V(Max) @ I_C = 1.5A$
- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 60V(Min)$

**APPLICATIONS**

- Designed for general purpose amplifier and switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{CEO}$	Collector-Emitter Voltage	60	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	3	A
$P_C$	Collector Power Dissipation@ $T_C=25^{\circ}C$	55	W
$T_J$	Junction Temperature	200	$^{\circ}C$
$T_{stg}$	Storage Temperature	-65~200	$^{\circ}C$



**isc Silicon NPN Power Transistor****2N1470****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=100\text{mA}; I_B=0$	60		V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=1\text{mA}; I_E=0$	60		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=1.5\text{A}; I_B=0.15\text{A}$		1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=1.5\text{A}; I_B=0.15\text{A}$		1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=1.5\text{A}; V_{CE}=5\text{V}$		1.5	V
$I_{CEO}$	Collector Cutoff Current	$V_{CE}=60\text{V}; I_B=0$		0.1	mA
$I_{CEX}$	Collector Cutoff Current	$V_{CE}=60\text{V}; V_{BE}=-1.5\text{V}$ $V_{CE}=60\text{V}; V_{BE}=-1.5\text{V}; T_C=150^{\circ}\text{C}$		0.1 2.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$		1.0	mA
$h_{FE-1}$	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	15		
$h_{FE-2}$	DC Current Gain	$I_C=3\text{A}; V_{CE}=5\text{V}$	5		