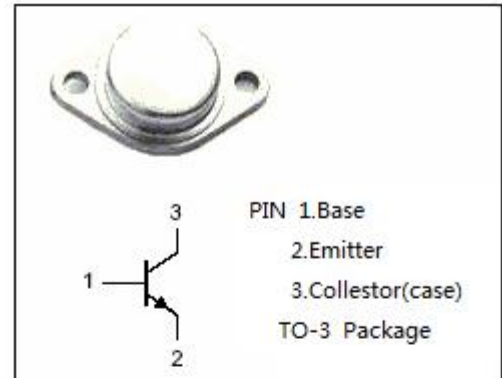


isc Silicon NPN Power Transistor
2N4114
DESCRIPTION

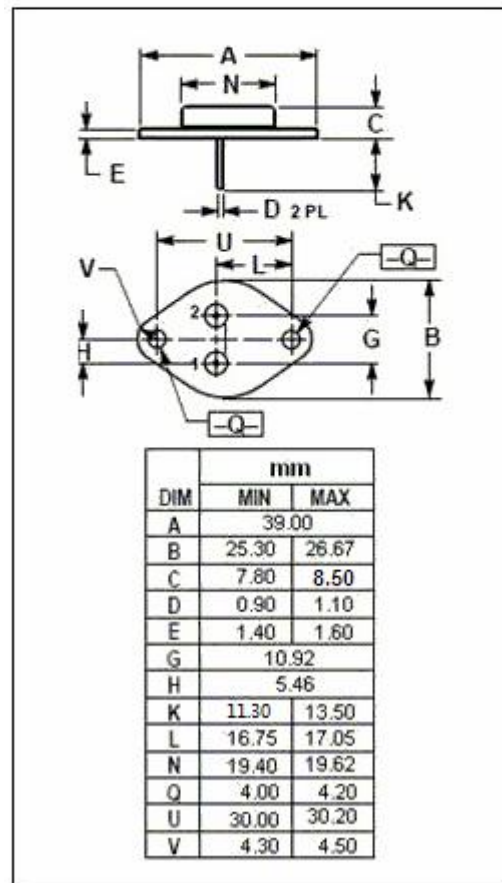
- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

- Designed for general-purpose switching and amplifier applications


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	120	V
V _{CEO}	Collector-Emitter Voltage	80	V
V _{EBO}	Emitter-Base Voltage	8	V
I _c	Collector Current-Continuous	5	A
P _C	Collector Power Dissipation@T _c =25°C	30	W
T _J	Operating Temperature Range	-65~+165	°C
T _{stg}	Storage Junction Temperature Range	-65~+165	°C


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	4.67	°C/W

isc Silicon NPN Power Transistors**2N4114****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=30\text{mA}$; $I_B=0$	80		V
I_{CEO}	Collector Cutoff Current	$V_{CE}=60\text{V}$; $I_B=0$		0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=8.0\text{V}$; $I_C=0$		1	mA
h_{FE}	DC Current Gain	$I_C=2\text{A}$; $V_{CE}=5\text{V}$	100	200	
f_T	Current Gain-Bandwidth Product	$I_C=0.5\text{A}$; $V_{CE}=10\text{V}$; $f=1.0\text{MHz}$	60		MHz

NOTICE:

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