

**isc Silicon NPN Power Transistor**

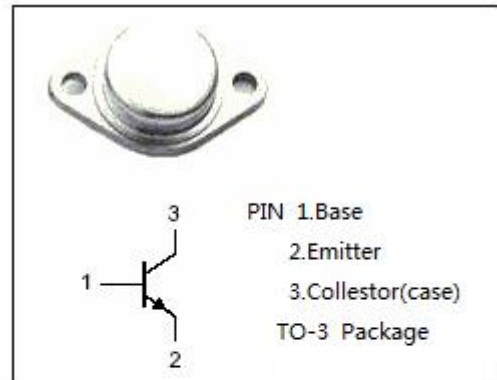
**2N3226**

**DESCRIPTION**

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

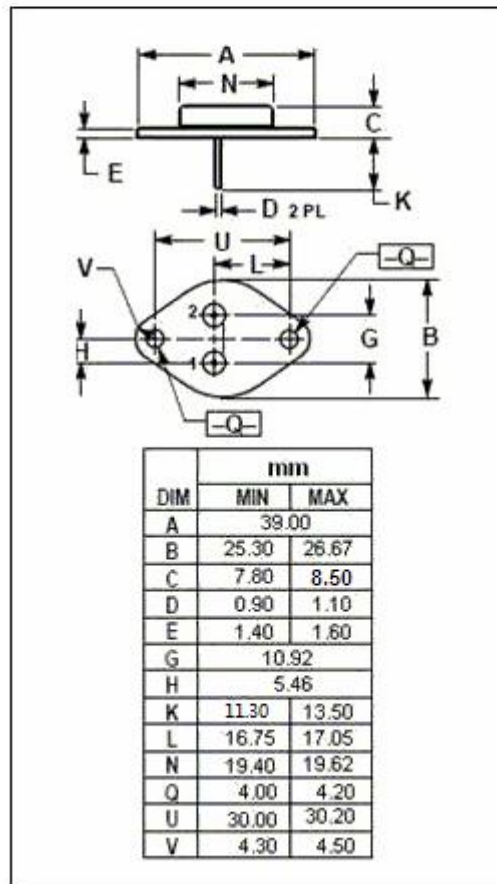
**APPLICATIONS**

- Designed for power amplifier and switching circuits applications



**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CB0</sub>	Collector-Base Voltage	35	V
V <sub>CER</sub>	Collector-Emitter Voltage	35	V
V <sub>CEO</sub>	Collector-Emitter Voltage	35	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current-Continuous	5	A
P <sub>C</sub>	Collector Power Dissipation@T <sub>c</sub> =25°C	75	W
T <sub>J</sub> , T <sub>stg</sub>	Operating and Storage Junction Temperature Range	-65~+150	°C



**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.17	°C/W

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## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE0(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=30\text{mA}$ ; $I_B=0$	35		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C= 3\text{A}$ ; $I_B= 0.3\text{A}$		1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}$ ; $I_B= 1\text{A}$		2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C= 3\text{A}$ ; $V_{CE}= 4\text{V}$		2.0	V
$I_{CEO}$	Collector Cutoff Current	$V_{CE}=35\text{V}$ ; $I_B=0$		0.1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 5\text{V}$ ; $I_C=0$		0.1	mA
$h_{FE-1}$	DC Current Gain	$I_C=1\text{A}$ ; $V_{CE}= 4\text{V}$	40		
$h_{FE-2}$	DC Current Gain	$I_C= 3\text{A}$ ; $V_{CE}= 4\text{V}$	20		

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