

# isc Silicon PNP Power Transistor

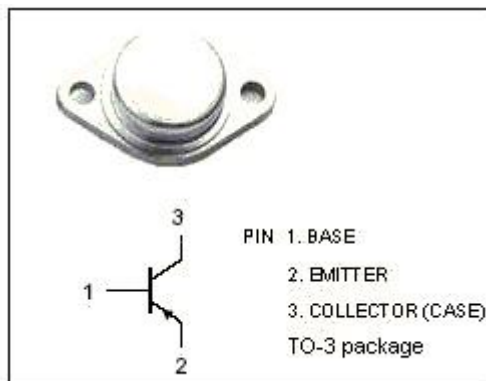
# 2N3174

## DESCRIPTION

- Excellent Safe Operating Area
- Collector-Emitter Saturation Voltage-  
:  $V_{CE(sat)} = -0.75V(\text{Max}) @ I_c = -1A$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

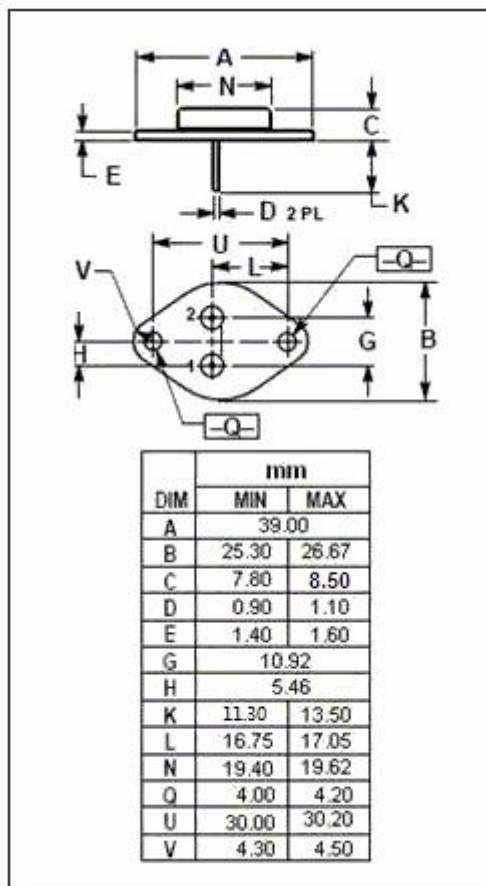
## APPLICATIONS

- All semelab hermetically sealed products, can be processed in accordance with the requirements of BS, CECC, and JAN, JANTX and JANTXV and JAN specifications.



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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-100	V
$V_{EBO}$	Emitter-Base Voltage	-10	V
$I_c$	Collector Current-Continuous	-3	A
$P_c$	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	75	W
$T_j, T_{stg}$	Operating and Storage Junction Temperature Range	-65~+150	$^\circ\text{C}$



## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.67	$^\circ\text{C}/\text{W}$

**isc Silicon PNP Power Transistors****2N3174****ELECTRICAL CHARACTERISTICS**T<sub>C</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -1A; I <sub>B</sub> = -0.14A		-0.75	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -1A; I <sub>B</sub> = -0.14A		-1.8	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -100V; I <sub>B</sub> =0		-0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -10V; I <sub>C</sub> =0		-0.1	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -1A; V <sub>CE</sub> = -3V	12	36	

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