

isc Silicon PNP Power Transistor

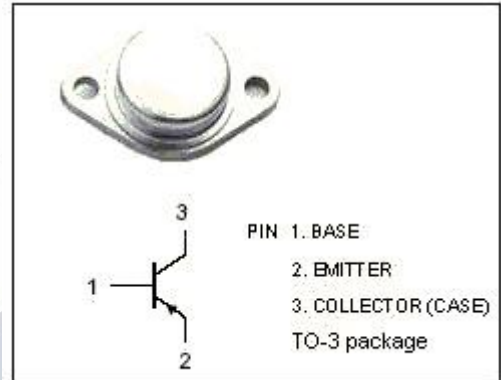
2N3174

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

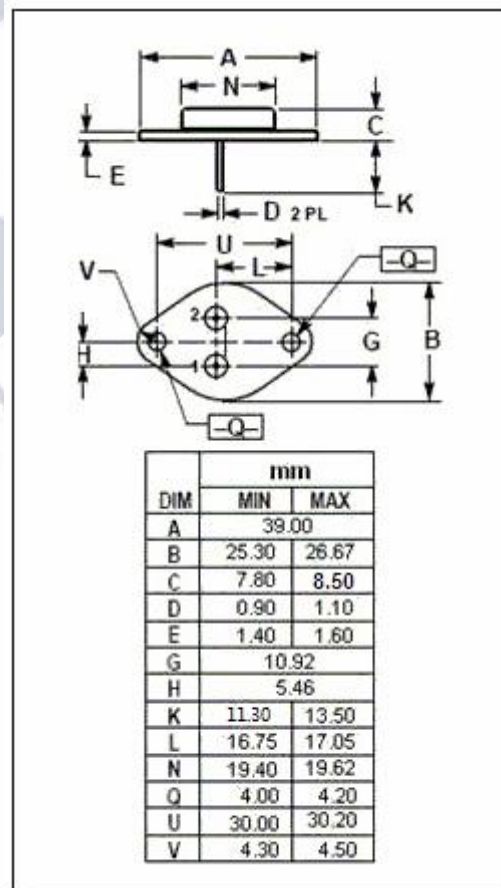
APPLICATIONS

- 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	$^\circ\text{C/W}$

isc Silicon PNP Power Transistors**2N3174****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1\text{A}; I_B = -0.14\text{A}$		-0.75	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1\text{A}; I_B = -0.14\text{A}$		-1.8	V
I_{CEO}	Collector Cutoff Current	$V_{CE} = -100\text{V}; I_B = 0$		-0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -10\text{V}; I_C = 0$		-0.1	mA
h_{FE}	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -3\text{V}$	12	36	