

isc Silicon PNP Power Transistor

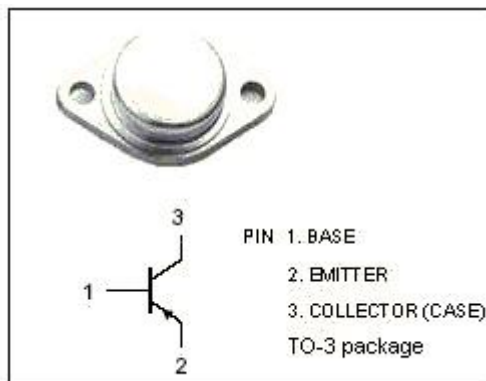
2N3171

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

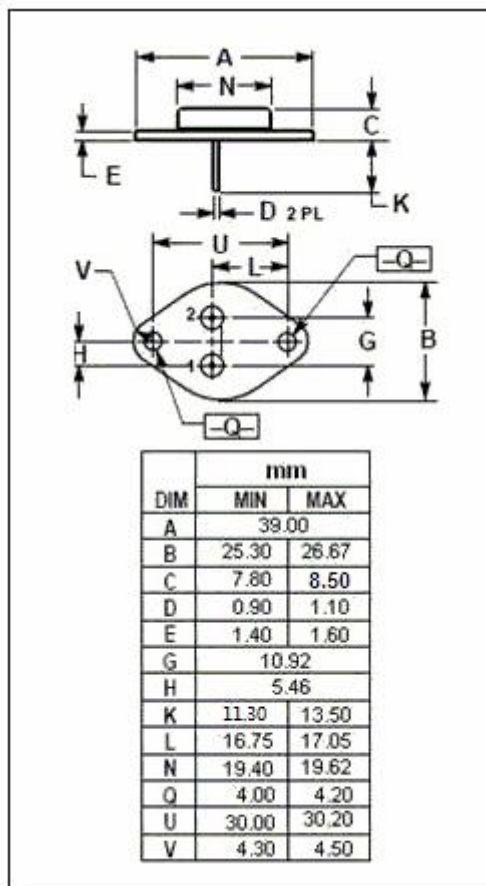
APPLICATIONS

- 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	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	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	$^\circ\text{C}/\text{W}$

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -1A; I _B = -0.14A		-0.75	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -1A; I _B = -0.14A		-1.8	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -40V; I _B =0		-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -10V; I _C =0		-0.1	mA
h _{FE}	DC Current Gain	I _C = -1A; V _{CE} = -3V	12	36	

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