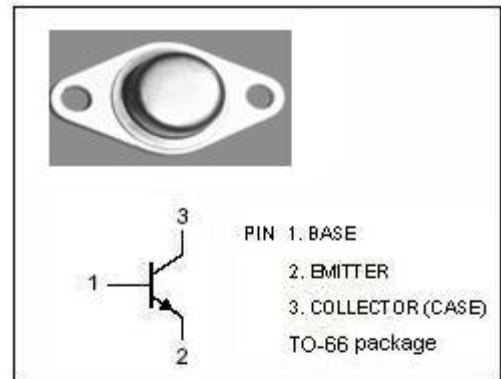


isc Silicon NPN Power Transistor
2SC1034
DESCRIPTION

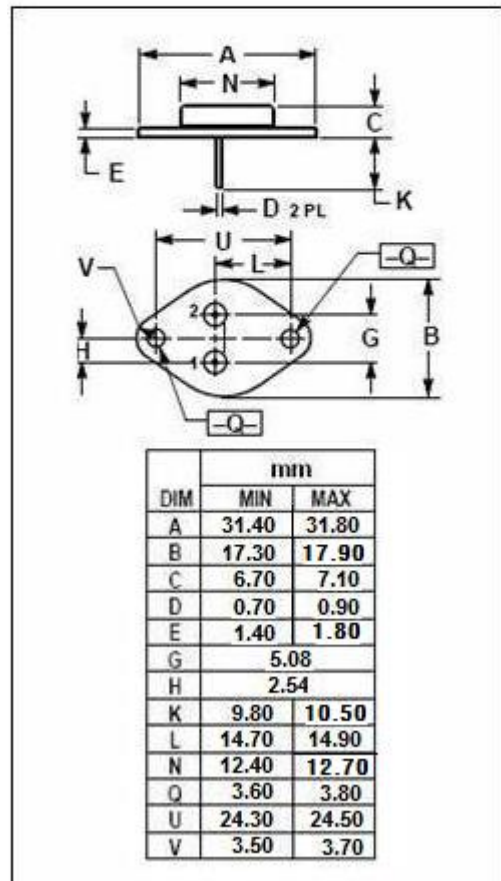
- DC Current Gain $-h_{FE} = 4(\text{Min}) @ I_C = 0.75\text{A}$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(\text{SUS})} = 700\text{V}(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

- Designed for use in general purpose power amplifier and switching applications


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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1100	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1.0	A
I_{CM}	Collector Current-Peak	5.0	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$


THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	5.0	$^\circ\text{C/W}$

isc Silicon NPN Power Transistor

2SC1034

ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=0.75\text{A}; I_B=0.075\text{A}$		5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=0.75\text{A}; I_B=0.075\text{A}$		1.4	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=800\text{V}; I_B=0$		5.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=8\text{V}; I_C=0$		4.0	mA
h_{FE}	DC Current Gain	$I_C=0.75\text{A}; V_{CE}=3\text{V}$	4	40	
f_T	Current-Gain—Bandwidth Product	$I_C=0.2\text{A}; V_{CE}=10\text{V}, f_{test}=1.0\text{MHz}$	5		MHz

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