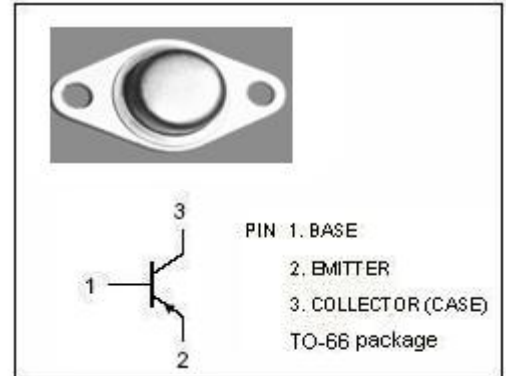


**isc Silicon PNP Power Transistor**
**2N5345**
**DESCRIPTION**

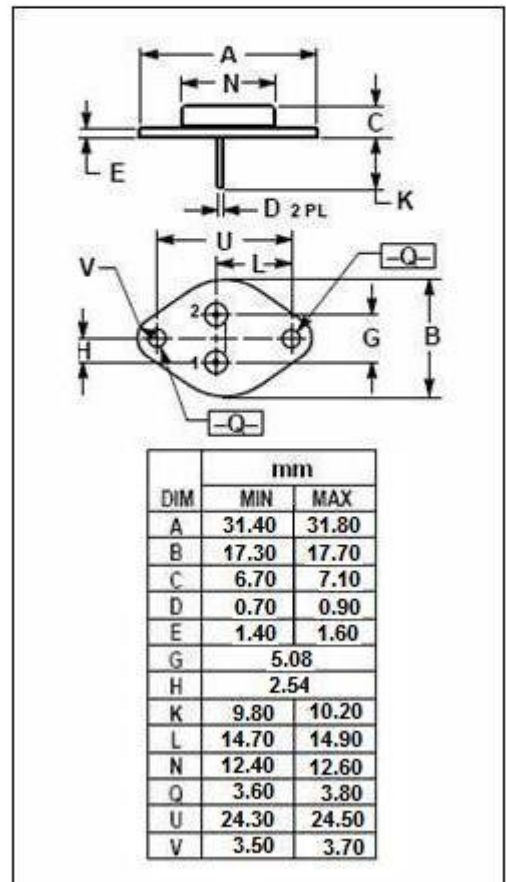
- High Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = -280V(\text{Min})$
- High Switching Speed
- High Current-Gain Bandwidth Product-  
:  $f_T = 60\text{MHz}(\text{Min}) @ I_C = -0.1A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for high voltage switching and amplifier applications.


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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-280	V
$V_{CEO}$	Collector-Emitter Voltage	-280	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-1.0	A
$I_B$	Base Current-Continuous	-0.5	A
$P_D$	Total Power Dissipation@ $T_C = 25^\circ\text{C}$	40	W
$T_J$	Junction Temperature	200	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-65~200	$^\circ\text{C}$


**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4.38	$^\circ\text{C/W}$

**isc Silicon PNP Power Transistor****2N5345****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CE0(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = -10mA ; I <sub>B</sub> = 0	-280		V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -1A; I <sub>B</sub> = -0.2A		-3.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -1A; I <sub>B</sub> = -0.2A		-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -250V; I <sub>E</sub> = 0		-0.1	mA
I <sub>CEX</sub>	Collector Cutoff Current	V <sub>CE</sub> = -225V; V <sub>BE(off)</sub> = -1.5V V <sub>CE</sub> = -225V; V <sub>BE(off)</sub> = -1.5V, T <sub>C</sub> = 150°C		-0.1 -1.0	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0		-0.1	mA
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -0.5A ; V <sub>CE</sub> = -5V	25	150	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -1A ; V <sub>CE</sub> = -5V	7		

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