

**isc Silicon NPN Power Transistor**

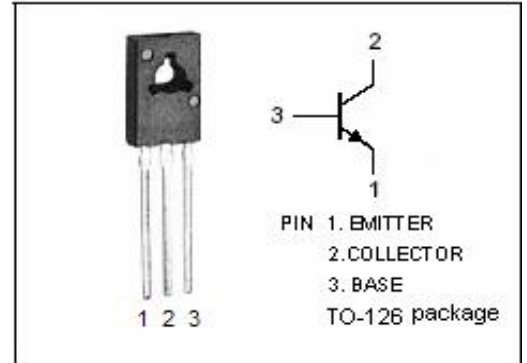
**2SC4001**

**DESCRIPTION**

- The 2SC4001 is designed for uses of high-resolution monitor TV applications. This makes it possible to raise the video band of high-resolution monitor TVs to 50MHz.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

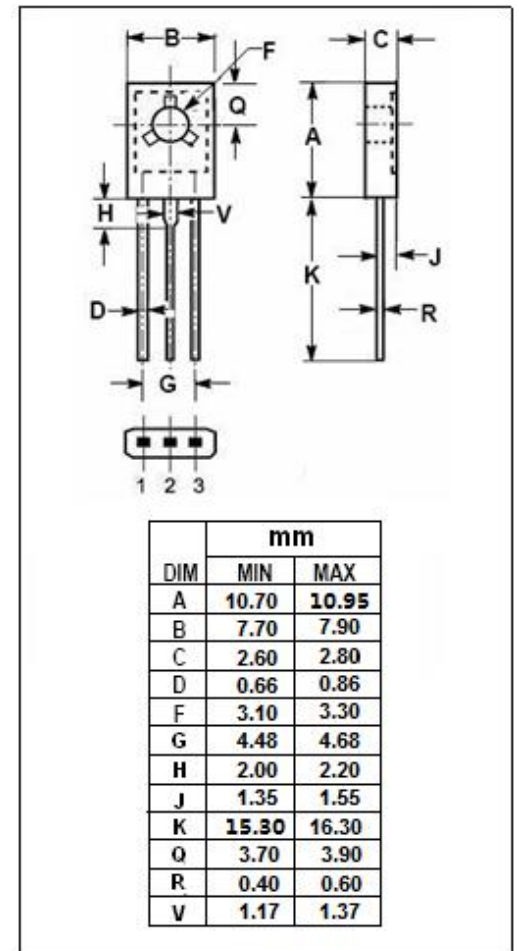
**FEATURES**

- Collector–Emitter Sustaining Voltage :  $V_{CBO} = 300\text{ V (Min)}$
- Complement to Type 2SA1546



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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	250	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_c$	Collector Current-Continuous	0.1	A
$P_C$	Collector Power Dissipation $T_C=25^\circ\text{C}$	7	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



## isc Silicon NPN Power Transistor

2SC4001

## ELECTRICAL CHARACTERISTICS

T<sub>c</sub> =25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I <sub>CB0</sub>	Collector Cutoff Current	V <sub>CB</sub> = 200V; I <sub>E</sub> = 0		100	nA
I <sub>EB0</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 3V; I <sub>C</sub> = 0		100	nA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 10m A ; V <sub>CE</sub> =10V	60		300
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 10mA ; I <sub>B</sub> =1mA		0.3	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 10mA ; I <sub>B</sub> = 1mA		1.2	V
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = 30mA ; V <sub>CE</sub> = 30V	200		MHz
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = 30V; f <sub>test</sub> = 1.0MHz		3.5	pF

◆ h<sub>FE</sub> Classifications

M	L	K
60-120	100-200	160-300

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