

isc Silicon PNP Power Transistor

2N5401

DESCRIPTION

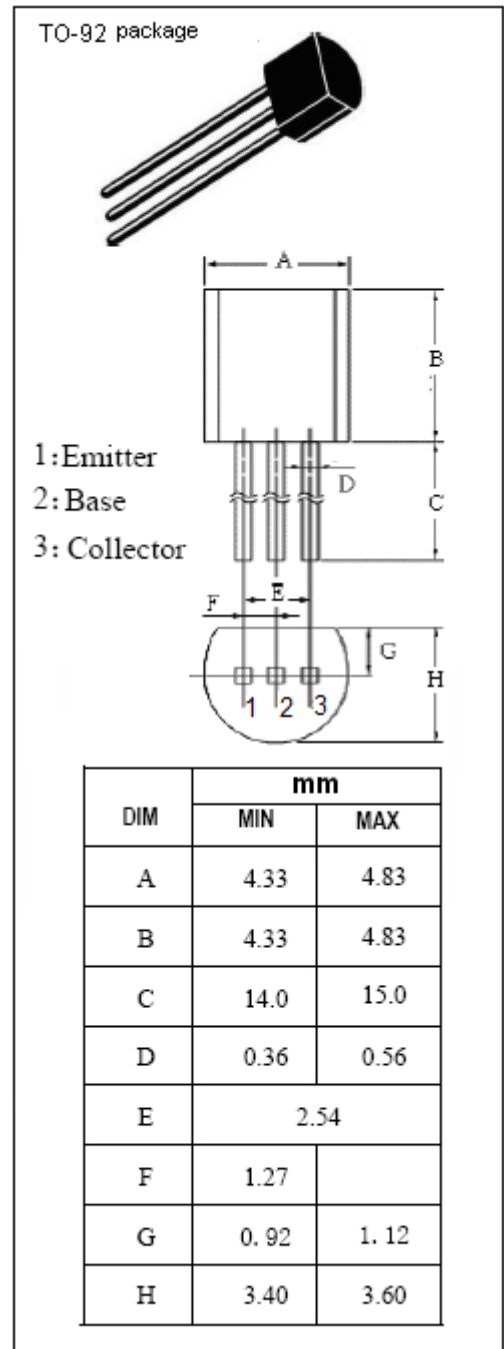
- PNP high-voltage transistor
- Low current (max. 300 mA)
- High voltage (max. 160 V)
- Complements to 2N5551.

APPLICATIONS

- Designed for Switching and amplification in high voltage applications , such as telephony applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-180	V
V_{CEO}	Collector-Emitter Voltage	-160	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	0.3	A
I_{CM}	Collector Current-Peak	0.6	A
I_{BM}	Base Current-Peak	0.1	A
P_C	Collector Power Dissipation @ $T_a < 50^{\circ}\text{C}$	0.63	W
J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^{\circ}\text{C}$



isc Silicon PNP Power Transistor**2N5551****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=10\text{mA}; I_B=1\text{mA}$			-0.15	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=50\text{mA}; I_B=5\text{mA}$			-0.2	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	$I_C=10\text{mA}; I_B=1\text{mA}$			-1.0	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	$I_C=50\text{mA}; I_B=5\text{mA}$			-1.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=120\text{V}; I_E=0$ $V_{CB}=120\text{V}; I_E=0 T_a=100^\circ\text{C}$			-50 -50	nA uA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=4\text{V}; I_C=0$			-50	nA
h_{FE}	DC Current Gain	$I_C=1\text{mA}; V_{CE}=5\text{V}$	80			
h_{FE}	DC Current Gain	$I_C=10\text{mA}; V_{CE}=5\text{V}$	80		250	
h_{FE}	DC Current Gain	$I_C=50\text{mA}; V_{CE}=5\text{V}$	30			
f_T	Current-Gain—Bandwidth Product	$I_C=10\text{mA}; V_{CE}=10\text{V}$	100		300	MHz