isc Silicon NPN Power Transistor 2N5551

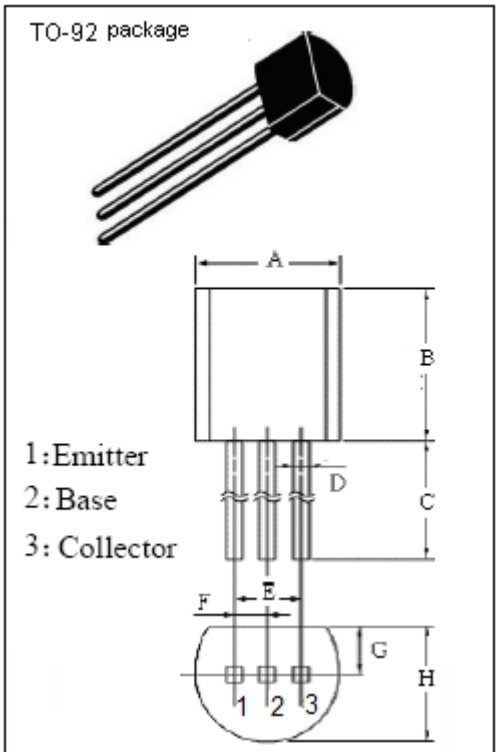
DESCRIPTION

- NPN high-voltage transistor
- Low current (max. 300 mA)
- High voltage (max. 160 V)
- Complements to 2N5401.

APPLICATIONS

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

TO-92 package



DIM	mm	
	MIN	MAX
A	4.33	4.83
B	4.33	4.83
C	14.0	15.0
D	0.36	0.56
E	2.54	
F	1.27	
G	0. 92	1. 12
H	3.40	3.60

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	0.63	W
J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

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