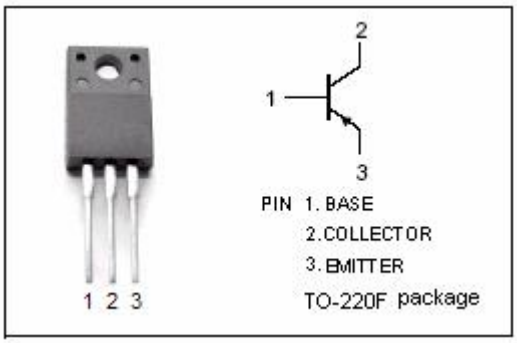
isc Silicon PNP Power Transistor 2SA1451A

DESCRIPTION

- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= -0.4V(Max)@I_C= -6A
- Good Linearity of h_{FE}
- High Switching Speed
- Complement to Type 2SC3709A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

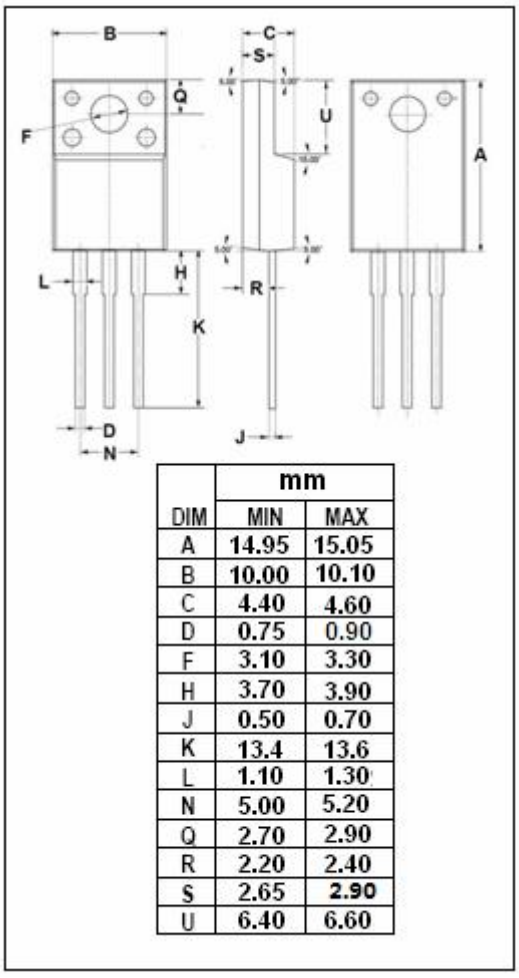


APPLICATIONS

- Designed for high current switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-12	A
I_B	Base Current-Continuous	-2	A
P_C	Collector Power Dissipation @ T_C=25℃	30	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -50mA; I_B= 0	-50			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -6A; I_B= -0.3A			-0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -6A; I_B= -0.3A			-1.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -60V; I_E= 0			-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -6V; I_C= 0			-10	μA
h_{FE-1}	DC Current Gain	I_C= -1A ; V_{CE}= -1V	70		240	
h_{FE-2}	DC Current Gain	I_C= -6A ; V_{CE}= -1V	40			

◆ **h_{FE-1} Classifications**

O	Y
70-140	120-240

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