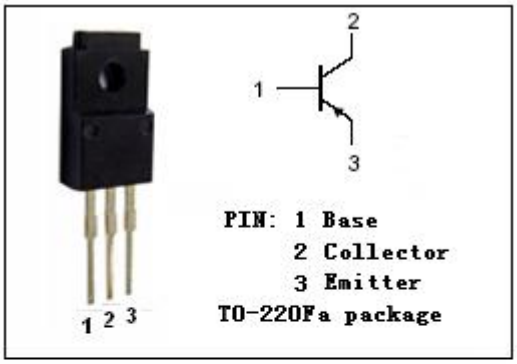
isc Silicon PNP Power Transistor — 2SB946A



DESCRIPTION

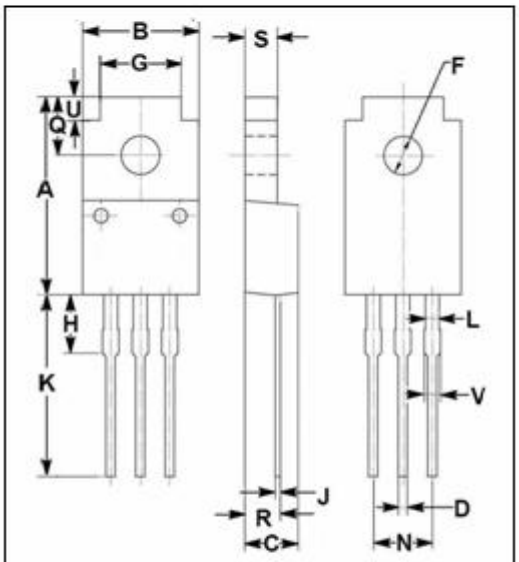
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= -0.5V(Max)@I_C= -5A
- Good Linearity of h_{FE}
- Large Collector Current I_C
- Complement to Type 2SD1271A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-150	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-7	A
I_{CM}	Collector Current-Peak	-15	A
P_C	Collector Power Dissipation @ T_a=25℃	2	W
	Collector Power Dissipation @ T_C=25℃	40	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	16.85	17.15
B	9.54	10.10
C	4.35	4.65
D	0.75	0.90
F	3.20	3.40
G	6.90	7.20
H	5.15	5.45
J	0.45	0.75
K	13.35	13.65
L	1.10	1.30
N	4.98	5.18
Q	4.85	5.15
R	2.55	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

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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= -10mA ; I_B= 0	-100			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -5A; I_B= -0.25A			-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -5A; I_B= -0.25A			-1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -100V ; I_E= 0			-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V ; I_C=0			-50	μA
h_{FE-1}	DC Current Gain	I_C= -0.1A ; V_{CE}= -2V	45			
h_{FE-2}	DC Current Gain	I_C= -3A ; V_{CE}= -2V	60		260	

◆ **h_{FE-2} Classifications**

R	Q	P
60-120	90-180	130-260