

isc Silicon PNP Power Transistor

2SB946

DESCRIPTION

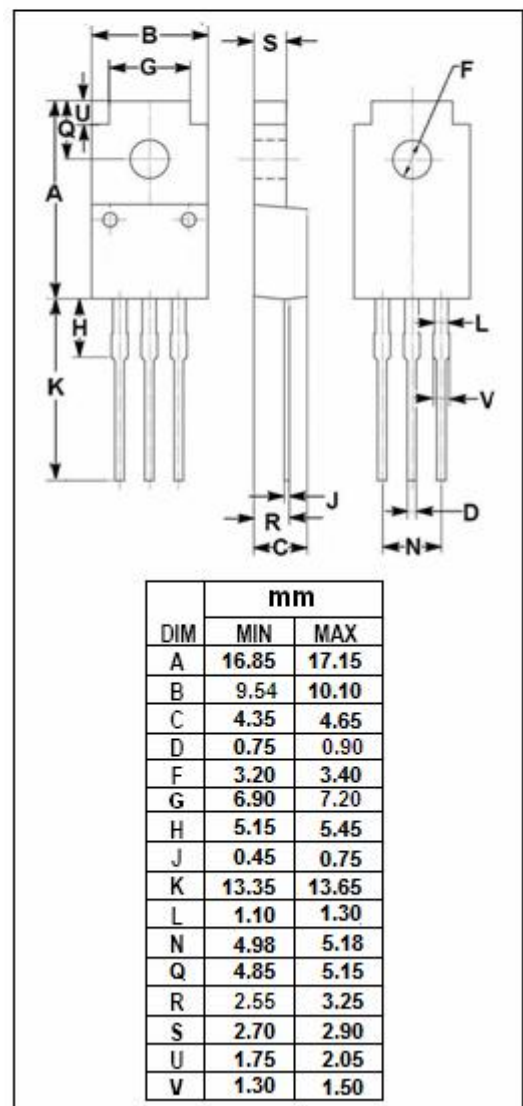
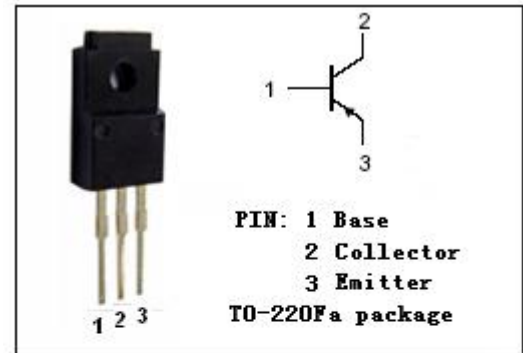
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -0.5V(Max) @ I_C = -5A$
- Good Linearity of h_{FE}
- Large Collector Current I_C
- Complement to Type 2SD1271
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-130	V
V_{CEO}	Collector-Emitter Voltage	-80	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 @ $T_a=25^{\circ}C$	2	W
	Collector Power Dissipation @ $T_c=25^{\circ}C$	40	
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon PNP Power Transistor**2SB946****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA ; I _B = 0	-80			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	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V ; I _C =0			-50	μ A
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	90		260	

◆ h_{FE-2} Classifications

Q	P
90-180	130-260

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