

isc Silicon PNP Power Transistor
2SB965
DESCRIPTION

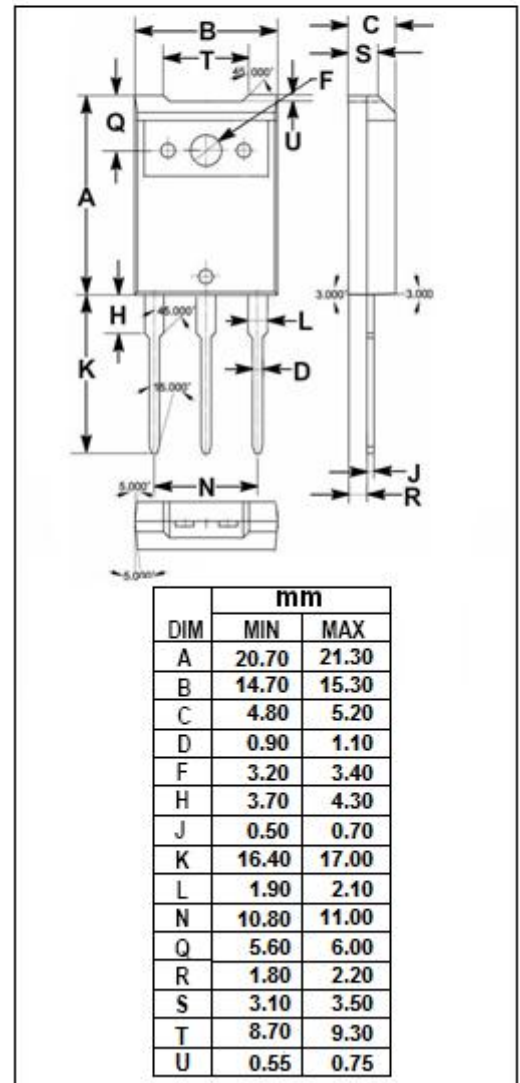
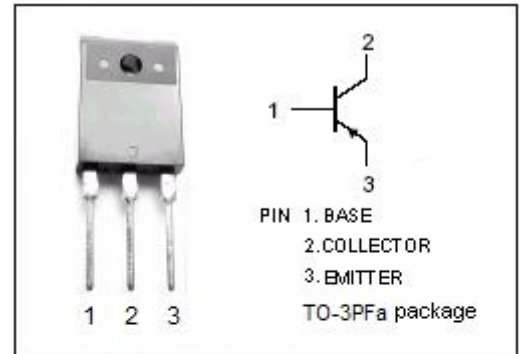
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.55V(Typ) @ I_C = -4.0A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -120V(Min)$
- Complement to Type 2SD1288
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Audio frequency power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-7	A
I_{CP}	Collector Current-Pulse	-10	A
P_C	Total Power Dissipation @ $T_c=25^\circ C$	70	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
V _{CE(sat)} ^{NOTE}	Collector-Emitter Saturation Voltage	I _C = -4.0A; I _B = -0.4A		-0.55	-1.5	V
V _{BE(sat)} ^{NOTE}	Base-Emitter Saturation Voltage	I _C = -4.0A; I _B = -0.4A		-1.25	-2.0	V
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-50	μ A
I _{CBO}	Collector Cutoff Current	V _{CB} = -120V; I _E = 0			-50	μ A
h _{FE1} ^{NOTE}	DC Current Gain	I _C = -1A; V _{CE} = -5V	60		320	
h _{FE2} ^{NOTE}	DC Current Gain	I _C = -50mA; V _{CE} = -5V	40			
f _T	Transition frequency	V _{CE} =-5V ,I _C =-1A		75		MHz
C _{ob}	Collector output capacitance	V _{CB} =-10V ,I _E =0,f=1MHz		150		pF

NOTE:Pulse test PW≤350us,duty cycle ≤2%

◆ h_{FE1} Classifications

R	Q	P
60-120	100-200	160-320

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