

isc Silicon NPN Power Transistor
2SD1288
DESCRIPTION

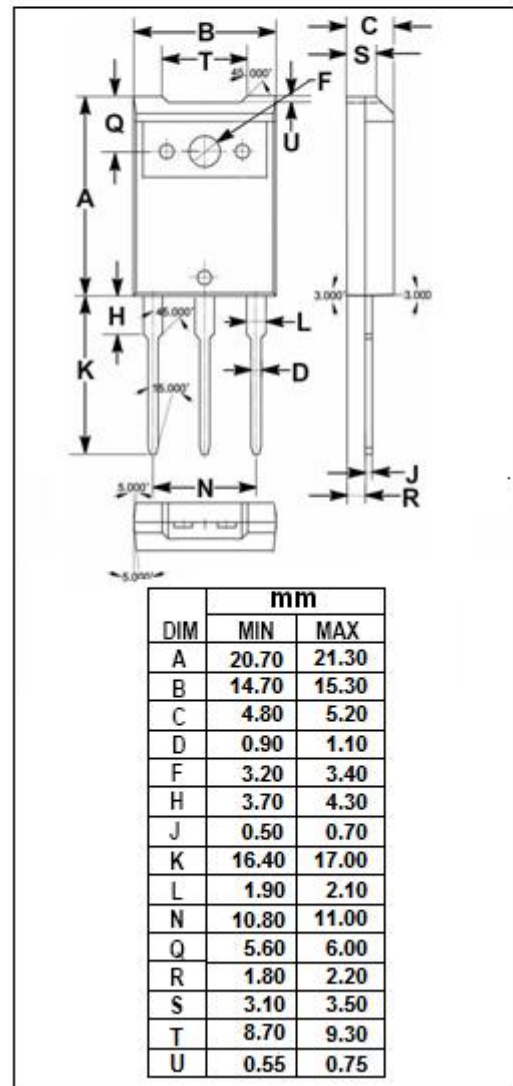
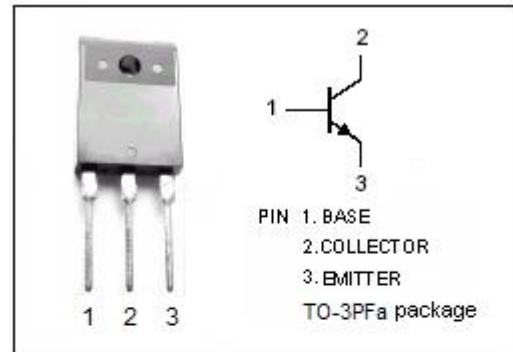
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 0.5V(Typ) @ I_C = 4.0A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 120V(Min)$
- Complement to Type 2SB965
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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	Collector 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
 $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}^{NOTE}$	Collector-Emitter Saturation Voltage	$I_C=4A; I_B=0.4A$		0.5	1.5	V
$V_{BE(sat)}^{NOTE}$	Base-Emitter Saturation Voltage	$I_C=4A; I_B=0.4A$		1.25	2.0	V
I_{CBO}	Collector Base Cutoff Current	$V_{CB}=120V; I_E=0$			50	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5V; I_C=0$			50	μA
h_{FE-1}^{NOTE}	DC Current Gain	$I_C=50mA; V_{CE}=5V$	40			
h_{FE-2}^{NOTE}	DC Current Gain	$I_C=1A; V_{CE}=5V$	60		320	
f_T	Current-Gain—Bandwidth Product	$I_C=1A; V_{CE}=5V$		55		MHz
C_{OB}	Output Capacitance	$I_E=0; V_{CB}=10V, f_{test}=1MHz$		85		pF

 NOTE:Pulse test $PW \leq 350\mu s$, duty cycle $\leq 2\%$
◆ h_{FE1} Classifications

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

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