

isc Silicon NPN Power Transistor

2SD1289

DESCRIPTION

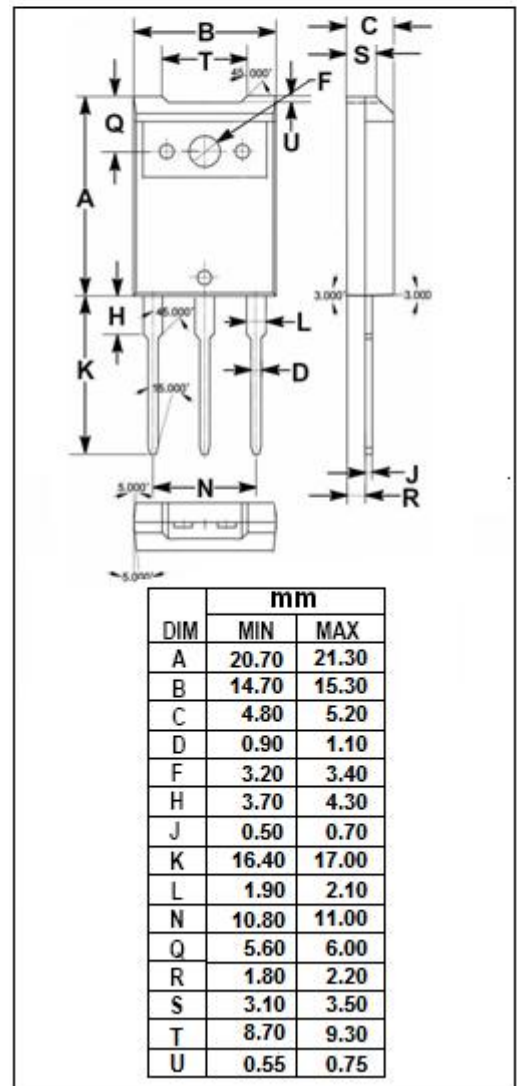
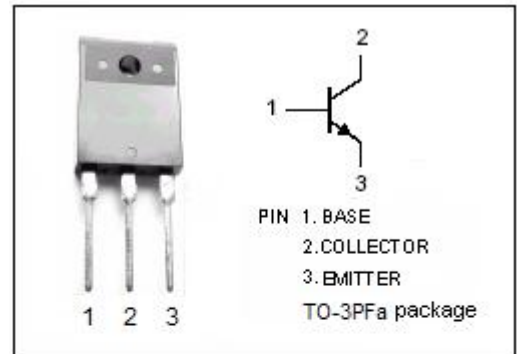
- Low Collector Saturation Voltage
: $V_{CE(sat)} = 0.65V(Typ) @ I_C = 5.0A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 120V(Min)$
- Complement to Type 2SB966
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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	8	A
I_{CP}	Collector Current-Pulse	12	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	80	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



isc Silicon NPN Power Transistor**2SD1289****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 = 5A; I _B = 0.5A		0.65	1.5	V
V _{BE(sat)} ^{NOTE}	Base-Emitter Saturation Voltage	I _C = 5A; I _B = 0.5A		1.25	2.0	V
I _{CBO}	Collector Base Cutoff Current	V _{CB} =120V; I _E = 0			50	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			50	uA
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		60		MHz
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V, f _{test} = 1MHz		120		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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