

INCHANGE Semiconductor

isc Product Specification

isc Silicon PNP Power Transistor

2SA671

DESCRIPTION

- Low Collector Saturation Voltage-
: $V_{CE(SUS)} = -1.0V(\text{Max}) @ I_C = -2.0A$
- DC Current Gain
: $h_{FE} = 35-320 @ I_C = -0.5A$
- Complement to Type 2SC1061

APPLICATIONS

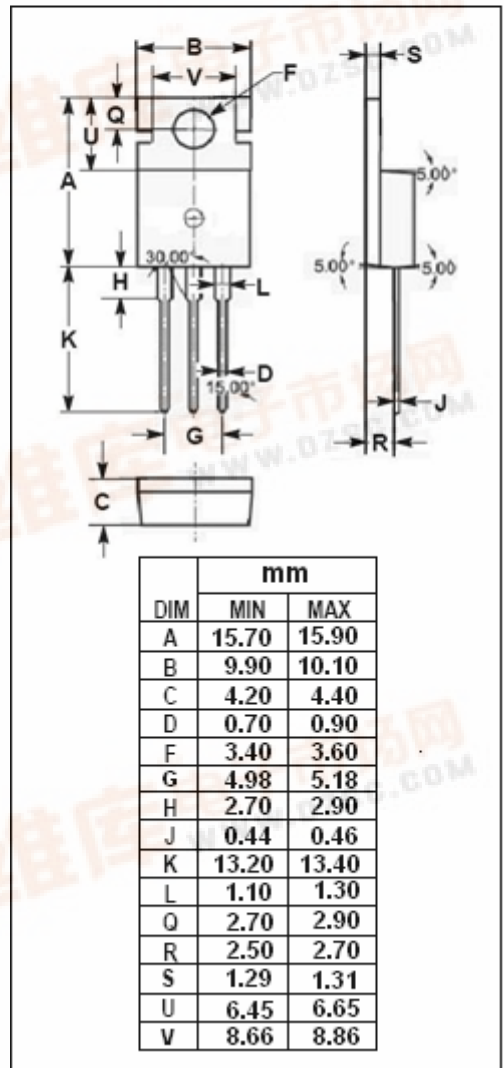
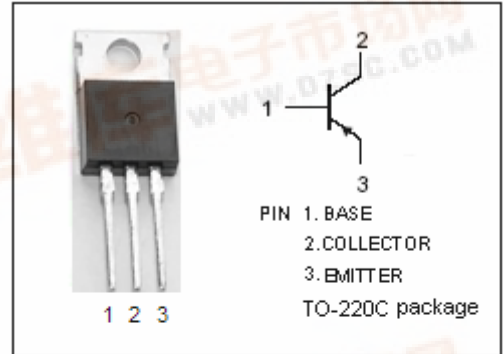
- Designed for use in low frequency power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-4	V
I_C	Collector Current-Continuous	-3	A
I_{CM}	Collector Current-Peak	-6	A
I_B	Base Current-Continuous	-0.5	A
P_C	Total Power Dissipation @ $T_C=25^\circ\text{C}$	25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	5.0	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -50\text{mA}$; $I_B = 0$	-50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -5\text{mA}$; $I_C = 0$	-7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}$; $I_B = -0.2\text{A}$			-1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -1\text{A}$; $V_{CE} = -4\text{V}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -25\text{V}$; $I_E = 0$			-100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}$; $I_C = 0$			-100	μA
h_{FE-1}	DC Current Gain	$I_C = -0.1\text{A}$; $V_{CE} = -4\text{V}$	35		320	
h_{FE-2}	DC Current Gain	$I_C = -1\text{A}$; $V_{CE} = -4\text{V}$	35			
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}$; $V_{CE} = -4\text{V}$; $f_{test} = 1\text{MHz}$	5			MHz

◆ h_{FE-1} Classifications

A	B	C	D
35-70	60-120	100-200	160-320