UNISONIC TECHNOLOGIES CO., LTD

2SD1071

Preliminary

NPN EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE POWER AMPLIFIER

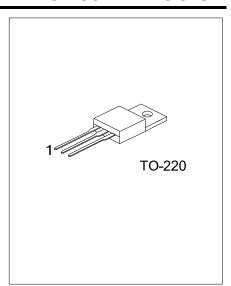
DESCRIPTION

The UTC **2SD1071** is a high voltage power amplifier, it uses UTC advanced technology to provide the customers high DC current gain and low saturation voltage, etc.

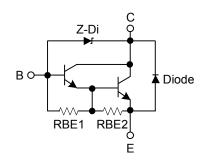
The UTC **2SD1071** is suitable for general purpose power amplifier and Motor controls, etc.

■ FEATURES

- * Low saturation voltage
- * High DC current gain

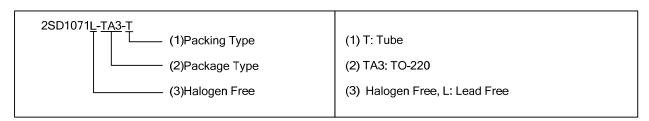


■ EQUIVALENT CIRCUIT



ORDERING INFORMATION

Ordering Number		Dookogo	Dooking	
Lead Free	Halogen Free	Package	Packing	
2SD1071L-TA3-T	2SD1071G-TA3-T	TO-220	Tube	



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■ ABSOLUTE MAXIMUM RATINGS (T_C=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector to Base Voltage	V_{CBO}	300	٧
Collector to Emitter Voltage	V_{CEO}	300	٧
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current	Ic	6	Α
Base Current	I _B	2.5	Α
Collector Dissipation	Pc	40	W
Junction Temperature	TJ	+150	°C
Storage Temperature	T _{STG}	-40~+150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	θ_{JC}	3	°C/W

■ ELECTRICAL CHARACTERISTICS (T_C =25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector to Base Voltage	V_{CBO}	I _{CBO} =1mA	300			٧
Collector to Emitter Voltage	V_{CEO}	I _{CEO} =1mA	300			٧
Emitter to Base Voltage	V_{EBO}	I _{EBO} =150mA	6			٧
Collector Cut-Off Current	I _{CBO}	V _{CBO} =250V			0.1	mΑ
Emitter Cut-Off Current	I _{EBO}	V _{EBO} =6V			150	mΑ
DC Current Gain	h _{FE}	V _{CE} =2V, I _C =4A	500			
Collector-Emitter Saturation Voltage	V _{CE(SAT})	_4A _45m4			1.5	٧
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C =4A, I _B =15mA			2.0	V

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