

Silicon NPN Power Transistors

2SD733 2SD733K

DESCRIPTION

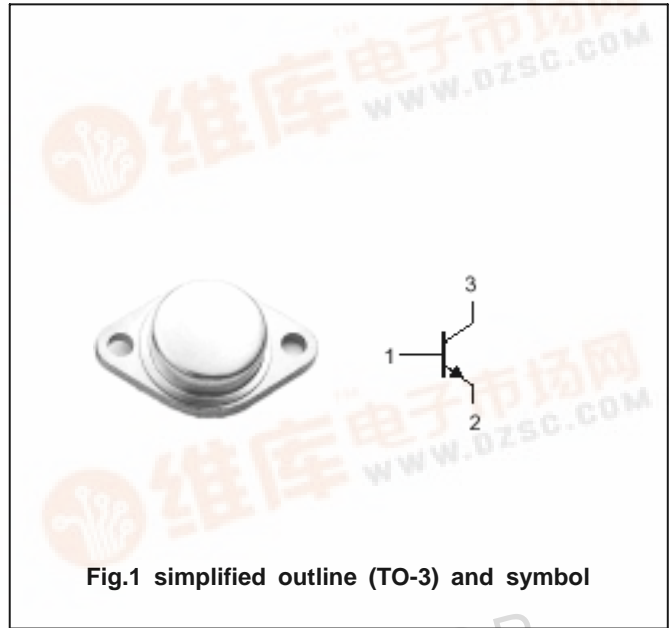
- With TO-3 package
- Complement to type 2SB697/697K
- High power dissipation

APPLICATIONS

- Power amplifier applications
- Recommended for high-power high-fidelity audio frequency amplifier output stage

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



Absolute maximum ratings(Ta= )

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT	
V <sub>CBO</sub>	Collector-base voltage	Open emitter	2SD733	160	V
			2SD733K	180	
V <sub>CEO</sub>	Collector-emitter voltage	Open base	2SD733	140	V
			2SD733K	160	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	6	V	
I <sub>C</sub>	Collector current		12	A	
I <sub>CM</sub>	Collector current-peak		20	A	
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25	100	W	
T <sub>j</sub>	Junction temperature		150		
T <sub>stg</sub>	Storage temperature		-40~150		

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## CHARACTERISTICS

T<sub>j</sub>=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	2SD733	I <sub>C</sub> =50mA ; I <sub>B</sub> =0	140			V
		2SD733K		160			
V <sub>(BR)CBO</sub>	Collector-emitter breakdown voltage	2SD733	I <sub>C</sub> =5mA ; I <sub>E</sub> =0	160			V
		2SD733K		180			
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =5mA ; I <sub>C</sub> =0	6			V	
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =6A ; I <sub>B</sub> =0.6A		0.7	2.5	V	
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V			1.5	V	
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =80V ; I <sub>E</sub> =0			0.1	mA	
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =4V ; I <sub>C</sub> =0			0.1	mA	
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =1A ; V <sub>CE</sub> =-5V	40		320		
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =5A ; V <sub>CE</sub> =5V	20				
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =1A ; V <sub>CE</sub> =5V		15		MHz	

◆ h<sub>FE-1</sub> Classifications

C	D	E	F
40-80	60-120	100-200	160-320

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PACKAGE OUTLINE

