

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

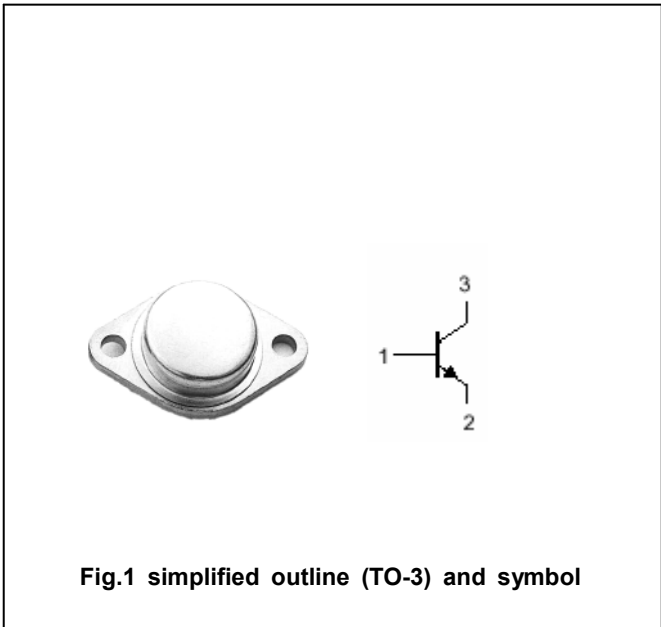


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	2SD733	160	V
		2SD733K	180	
V _{CEO}	Collector-emitter voltage	2SD733	140	V
		2SD733K	160	
V _{EBO}	Emitter-base voltage	Open collector	6	V
I _C	Collector current		12	A
I _{CM}	Collector current-peak		20	A
P _C	Collector power dissipation	T _C =25□	100	W
T _j	Junction temperature		150	□
T _{stg}	Storage temperature		-40~150	□

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

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

◆ h_{FE-1} Classifications

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

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PACKAGE OUTLINE

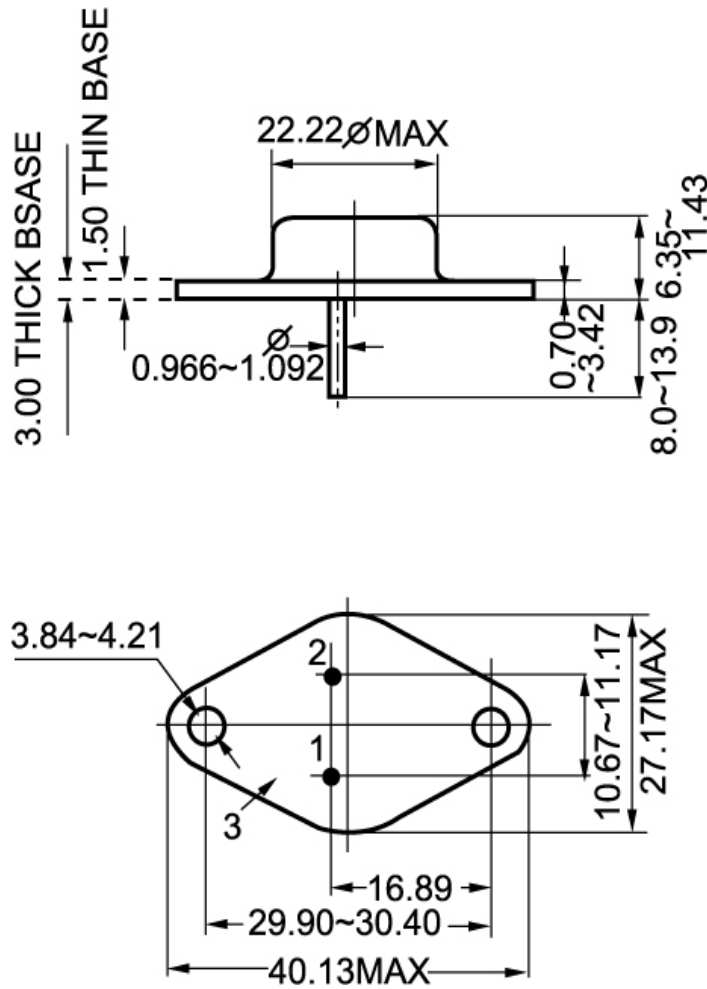


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)