

**Inchange Semiconductor**

**Product Specification**

**Silicon PNP Power Transistors**

**2N3791 2N3792**

**DESCRIPTION**

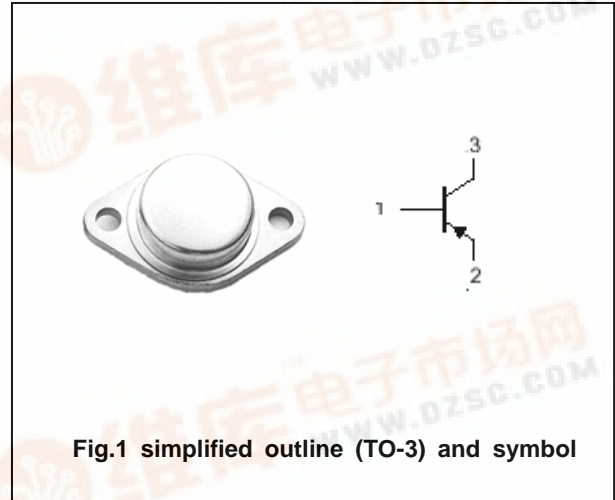
- With TO-3 package
- Complement to type 2N3715 ,2N3716
- Excellent safe operating area

**APPLICATIONS**

Designed for medium-speed switching and amplifier applications

**PINNING**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	2N3791	-60	V
		2N3792	-80	
V <sub>CEO</sub>	Collector-emitter voltage	2N3791	-60	V
		2N3792	-80	
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-7	V
I <sub>C</sub>	Collector current		-10	A
I <sub>B</sub>	Base current		-4	A
P <sub>D</sub>	Total Power Dissipation	T <sub>C</sub> =25°C	150	W
T <sub>j</sub>	Junction temperature		200	°C
T <sub>stg</sub>	Storage temperature		-65~200	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	VALUE	UNIT
R <sub>(th) jc</sub>	Thermal resistance junction to case	1.17	°C/W



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## CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT	
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	2N3791	I <sub>C</sub> =-0.2A ; I <sub>B</sub> =0	-60			V
		2N3792		-80			V
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-5A; I <sub>B</sub> =-0.5A			-1.0	V	
V <sub>BE(on)-1</sub>	Base-emitter on voltage	I <sub>C</sub> =-5A ; V <sub>CE</sub> =-2V			-1.8	V	
V <sub>BE(on)-2</sub>	Base-emitter on voltage	I <sub>C</sub> =-10A ; V <sub>CE</sub> =-4V			-4.0	V	
I <sub>C EX</sub>	Collector cut-off current	2N3791	V <sub>CE</sub> =-60V; V <sub>BE(off)</sub> =-1.5V T <sub>C</sub> =150°C			-1.0 -5.0	mA
		2N3792	V <sub>CE</sub> =-80V; V <sub>BE(off)</sub> =-1.5V T <sub>C</sub> =150°C			-1.0 -5.0	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-7V; I <sub>C</sub> =0			-5.0	mA	
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-2V	50		180		
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-3A ; V <sub>CE</sub> =-2V	30				
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =-0.5A; V <sub>CE</sub> =-10V	4			MHz	

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PACKAGE OUTLINE

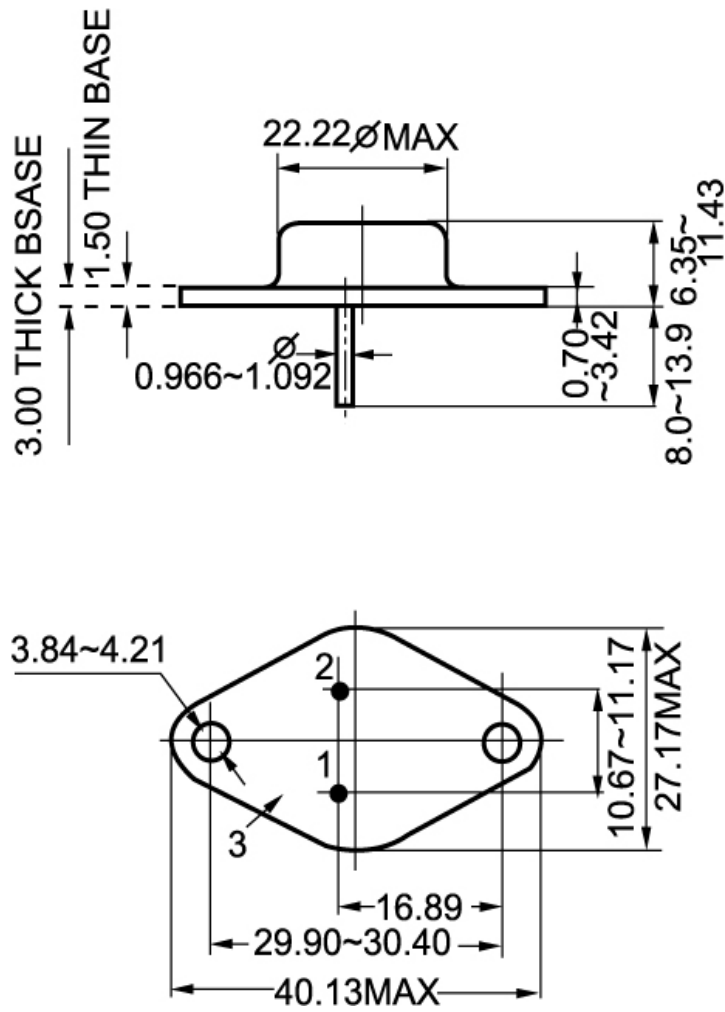


Fig.2 outline dimensions (unindicated tolerance:  $\pm 0.10\text{mm}$ )