

Silicon NPN Power Transistors

2SD716

DESCRIPTION

- With TO-3P(I) package
- Complement to type 2SB686

APPLICATIONS

- Power amplifier applications
- Recommend for 30~35W high fidelity audio frequency amplifier output stage

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

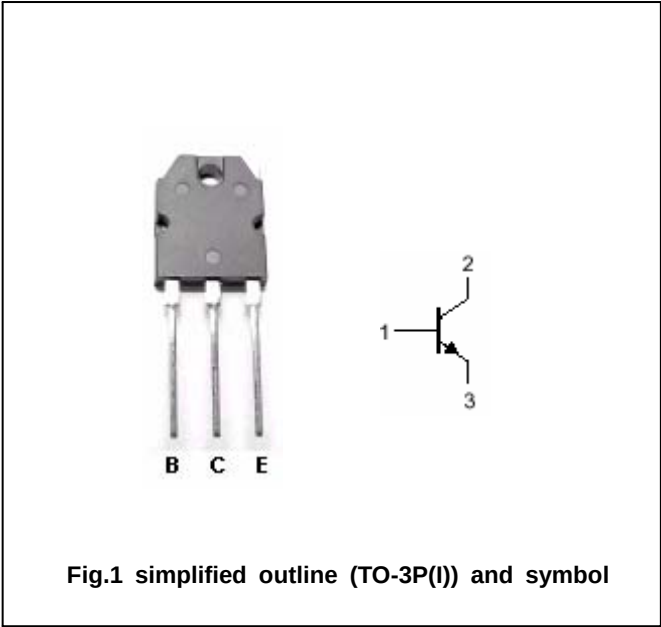


Fig.1 simplified outline (TO-3P(I)) and symbol

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	100	V
V _{CEO}	Collector-emitter voltage	Open base	100	V
V _{EBO}	Emitter-base voltage	Open collector	5	V
I _C	Collector current		6	A
I _E	Emitter current		-6	A
P _T	Total power dissipation	T _C =25°C	60	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

Silicon NPN Power Transistors

2SD716

CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=50mA, I_B=0$	100			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA, I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=4A; I_B=0.4A$			2.0	V
V_{BE}	Base-emitter voltage	$I_C=4A; V_{CE}=5V$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=100V; I_E=0$			10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V; I_C=0$			10	μA
h_{FE}	DC current gain	$I_C=1A; V_{CE}=5V$	55		160	
f_T	Transition frequency	$I_C=1A; V_{CE}=5V$		12		MHz
C_{ob}	Output capacitance	$I_E=0; V_{CB}=10V; f=1MHz$		100		pF

◆ h_{FE} Classifications

R	O
55-110	80-160

Silicon NPN Power Transistors

2SD716

PACKAGE OUTLINE

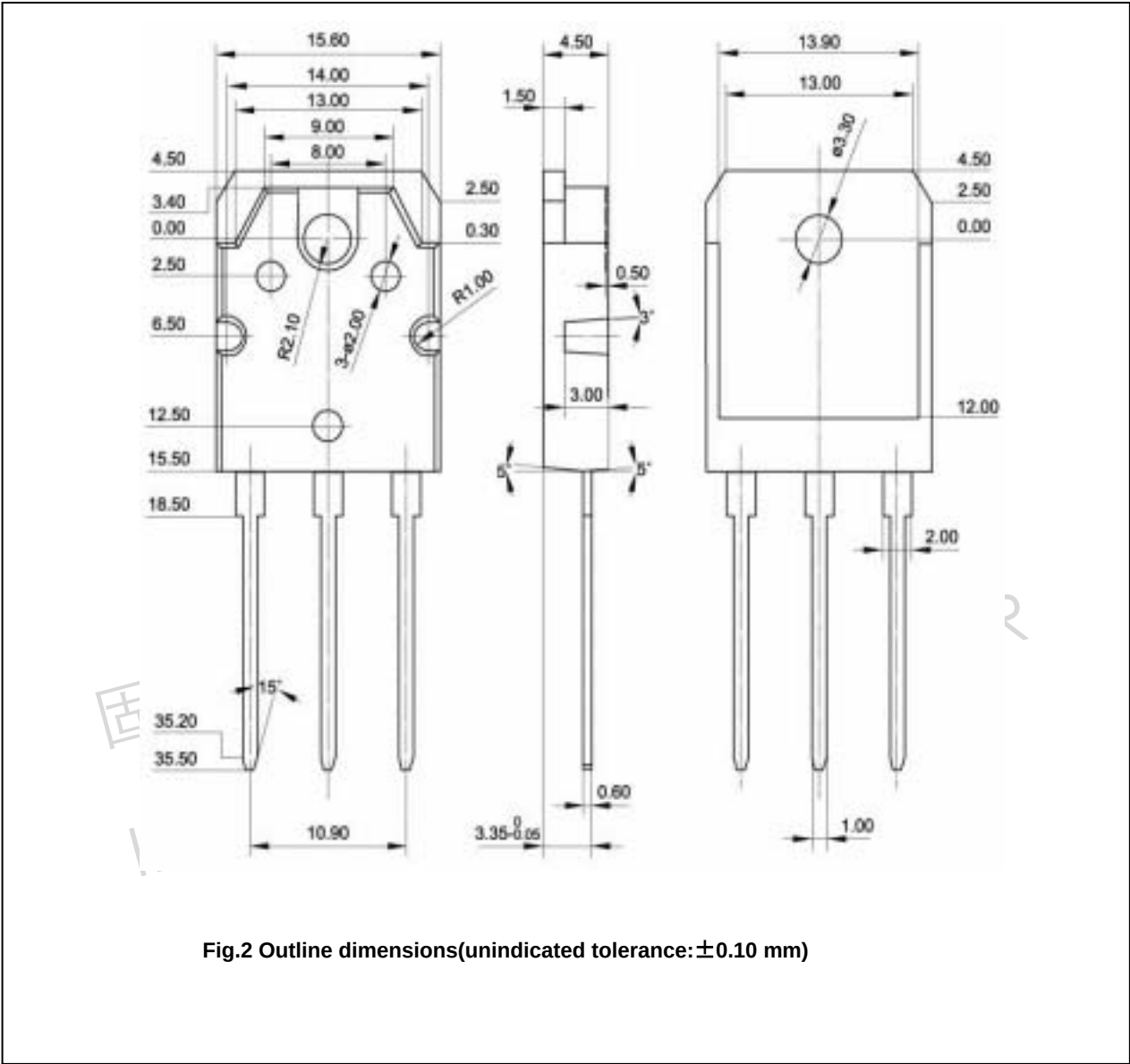


Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)