Silicon NPN Power Transistors 2SC4689

DESCRIPTION

- With TO-3PFM package
- Complementary to 2SA1804
- Recommend for 55W high fidelity audio frequency amplifier

APPLICATIONS

- Power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

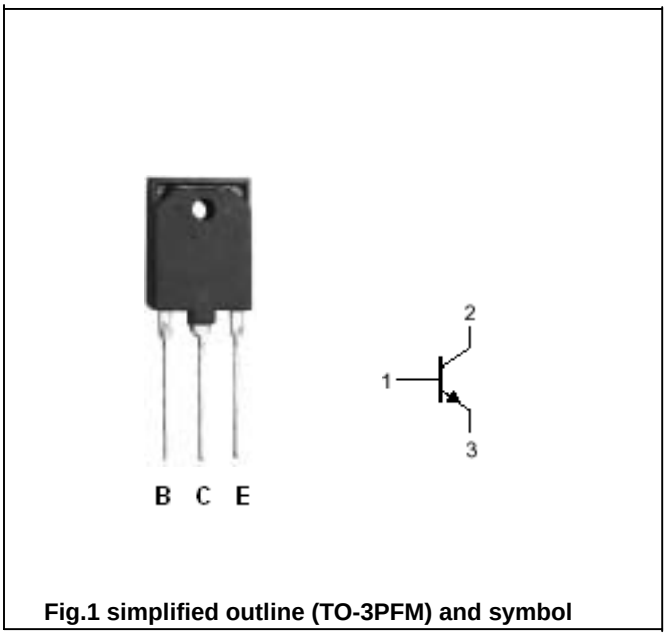

Fig.1 simplified outline (TO-3PFM) and symbol

Absolute maximum ratings(Ta=℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	120	V
V_{CEO}	Collector-emitter voltage	Open base	120	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		8	A
I_{CP}	Collector current-peak		16	A
I_B	Base current		0.8	A
P_C	Collector power dissipation	T_C=25℃	70	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=50mA ;I_B=0	120			V
I_{CBO}	Collector cut-off current	V_{CB}=120V; I_E=0			5	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			5	μA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=5V	55		160	
h_{FE-2}	DC current gain	I_C=4A ; V_{CE}=5V	35	75		
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=6A ; I_B=0.6A		0.35	2	V
V_{BE}	Base-emitter voltage	I_C=4A ; V_{CE}=5V		0.95	1.5	V
f_T	Transition frequency	I_C=1A ; V_{CE}=5V		30		MHz
C_{ob}	Collector output capacitance	I_E=0;V_{CB}=10V;f=1MHz		190		pF

◆ **h_{FE-1} classifications**

R	O
55-110	80-160

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PACKAGE OUTLINE

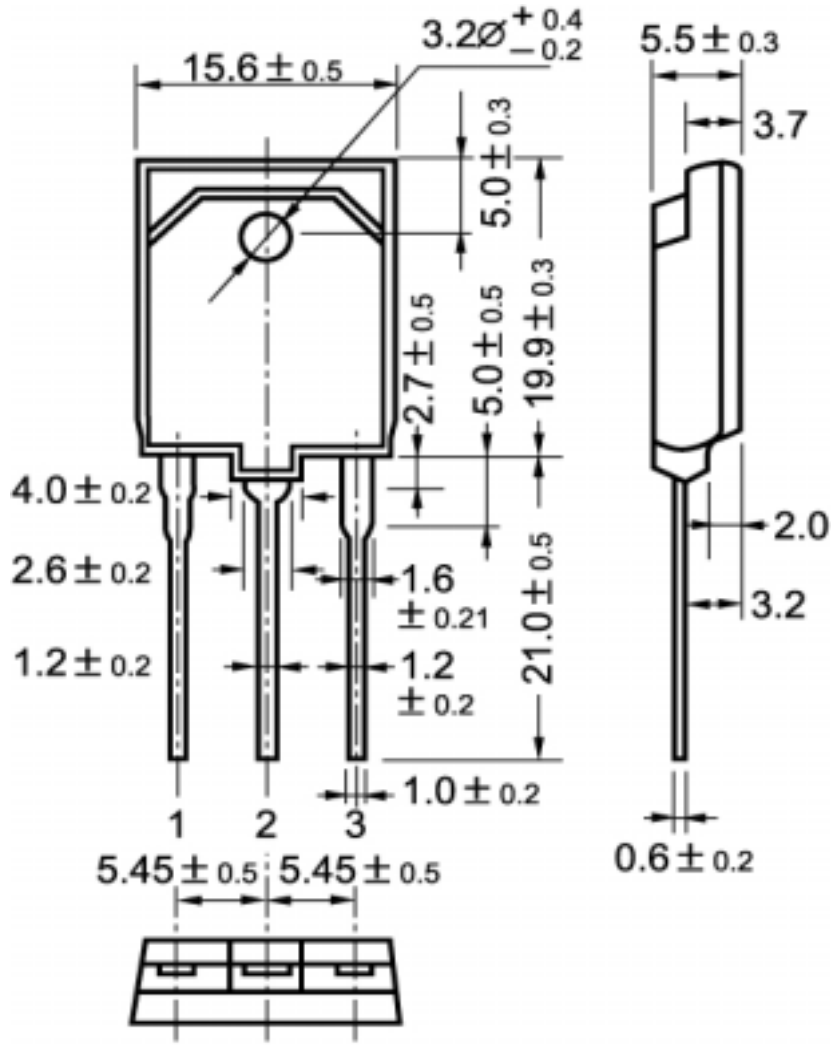

Fig.2 outline dimensions