

Silicon NPN Power Transistors

2SD188

DESCRIPTION

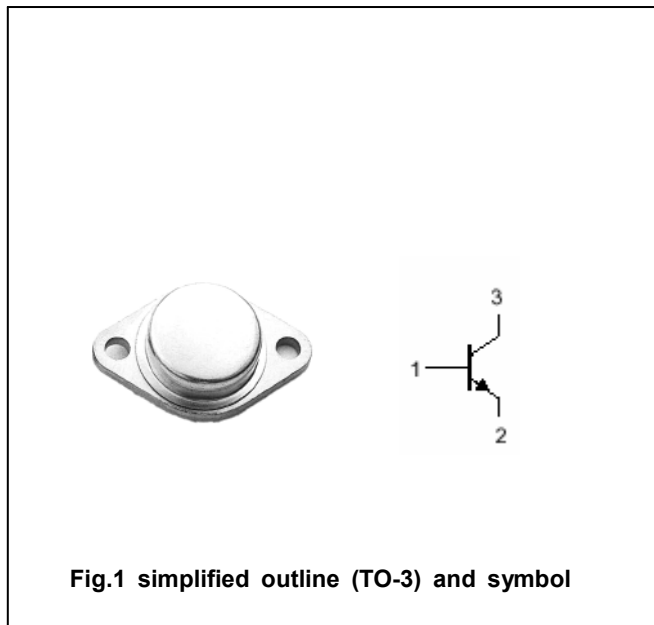
- With TO-3 package
- Large current capability
- Wide area of safe operation

APPLICATIONS

- For audio frequency output applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a = \square$)

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	6	V
I_C	Collector current		7	A
P_C	Collector power dissipation	$T_C = 75\square$	60	W
T_j	Junction temperature		150	$\square$
T_{stg}	Storage temperature		-55~150	$\square$

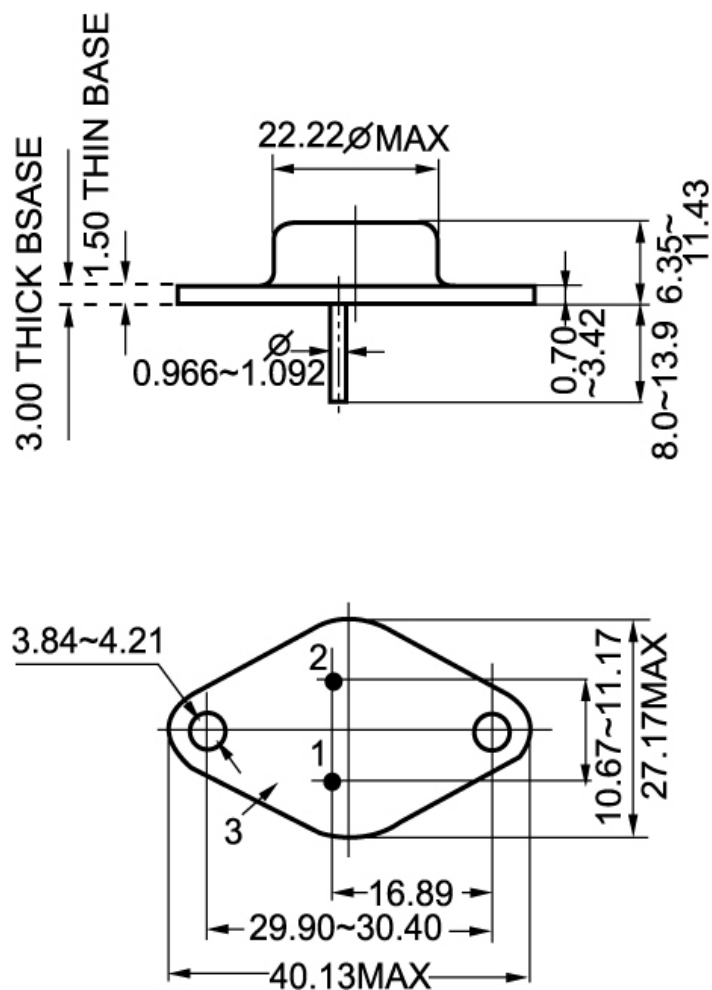
Silicon NPN Power Transistors**2SD188****CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=50mA ; I_B=0$	100			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA ; I_E=0$	100			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA ; I_C=0$	6			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=5A ; I_B=0.5A$			2.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=5A ; I_B=0.5A$			2.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=100V ; I_E=0$			0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=6V ; I_C=0$			0.1	mA
h_{FE}	DC current gain	$I_C=3A ; V_{CE}=2V$	30		120	
f_T	Transition frequency	$I_C=0.5A ; V_{CE}=10V$		10		MHz

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PACKAGE OUTLINE

Fig.2 outline dimensions (unindicated tolerance: $\pm 0.1\text{mm}$)