

**Silicon NPN Power Transistors**

**2SD388**

**DESCRIPTION**

- With TO-3 package
- High power dissipation

**APPLICATIONS**

- For use in power amplifier applications

**PINNING**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

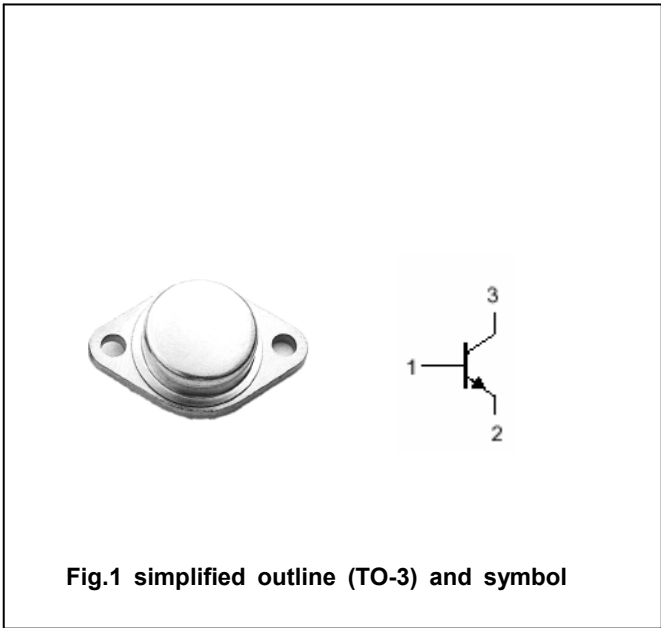


Fig.1 simplified outline (TO-3) and symbol

**Absolute maximum ratings(Ta=□)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	150	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	140	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		8	A
P <sub>C</sub>	Collector power dissipation	T <sub>C</sub> =25□	80	W
T <sub>j</sub>	Junction temperature		150	□
T <sub>stg</sub>	Storage temperature		-55~150	□

## Silicon NPN Power Transistors

2SD388

## CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.2A ; I_B=0$	140			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA ; I_C=0$	7			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=6A ; I_B=0.6A$			2.0	V
$V_{BEsat}$	Base-emitter saturation voltage	$I_C=6A ; I_B=0.6A$			2.5	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=150V ; I_E=0$			0.1	mA
$I_{EBO}$	Emitter cut-off current	$V_{EB}=7V ; I_C=0$			0.1	mA
$h_{FE-1}$	DC current gain	$I_C=1A ; V_{CE}=5V$	50			
$h_{FE-2}$	DC current gain	$I_C=5A ; V_{CE}=5V$	20			
$f_T$	Transition frequency	$I_C=1A ; V_{CE}=10V$		9		MHz

Silicon NPN Power Transistors

2SD388

PACKAGE OUTLINE



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