

# 2SD1588

Silicon NPN Transistors



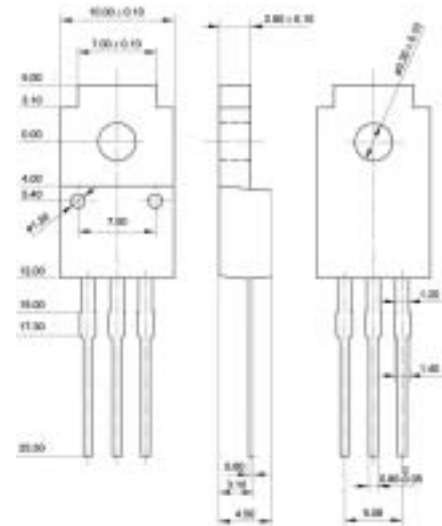
BCE

### ◆ Features

- . With TO-220Fa package
- . Low frequency power amplifiers and low-speed switching
- . Complement to type 2SB1097

### ◆ Absolute Maximum Ratings Tc=25°C

SYMBOL	PARAMETER	RATING	UNIT
V <sub>CB0</sub>	Collector to base voltage	100	V
V <sub>CEO</sub>	Collector to emitter voltage	60	V
V <sub>EBO</sub>	Emitter to base voltage	7	V
I <sub>C</sub>	Collector current	7	A
I <sub>CP</sub>	Collector current-Pluse	15	A
P <sub>C</sub>	Collector power dissipation	30	W
T <sub>j</sub>	Junction temperature	150	°C
T <sub>stg</sub>	Storage temperature	-55~150	°C



TO-220Fa

### ◆ Electrical Characteristics Tc=25°C

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
I <sub>CB0</sub>	Collector cut-off current	V <sub>CB</sub> =80V, I <sub>E</sub> =0;			10	uA
I <sub>EBO</sub>	Emitter ut-off current	V <sub>EB</sub> =5V, I <sub>C</sub> =0			10	uA
V <sub>CB0</sub>	Collector-base breakdown voltage					
V <sub>CEO</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =30mA; I <sub>B</sub> =0	60			V
V <sub>EBO</sub>	Emitter-base breakdown voltage					
V <sub>CE(sat-1)</sub>	Collector-emitter saturation voltages	I <sub>C</sub> =5A; I <sub>B</sub> =0.5A			0.5	V
V <sub>CE(sat-2)</sub>	Collector-emitter saturation voltages					
h <sub>FE-1</sub>	Forward current transfer ratio	I <sub>C</sub> =3A; V <sub>CE</sub> =1V	40		200	
h <sub>FE-2</sub>	Forward current transfer ratio	I <sub>C</sub> =5A; V <sub>CE</sub> =1V	20			
V <sub>BE(sat-1)</sub>	Base-emitter saturation voltages	I <sub>C</sub> =5A; I <sub>B</sub> =0.5A			1.5	V
V <sub>BE(sat-2)</sub>	Base-emitter saturation voltages					

### ◆ h<sub>FE-1</sub> Classifications

M	L	K
40-80	60-120	100-200