

Silicon NPN Power Transistors

2SC789

DESCRIPTION

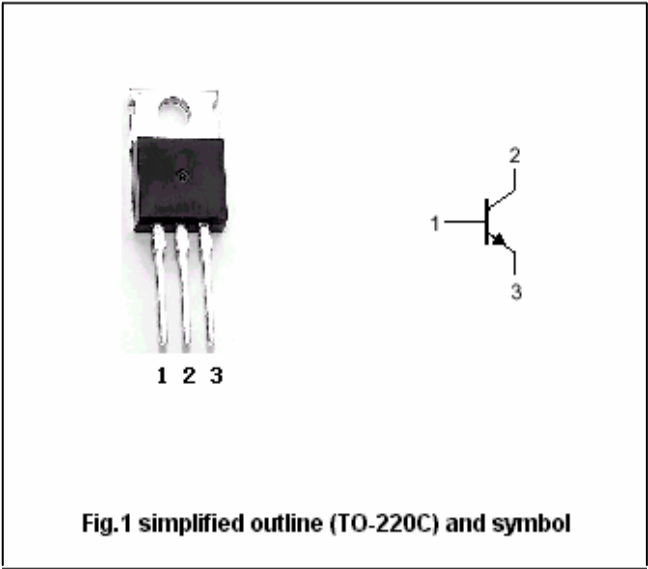
- With TO-220C package
- Low collector saturation voltage

APPLICATIONS

- For medium power linear and switching applications

PINNING

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



Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	70	V
V_{CEO}	Collector-emitter voltage	Open base	70	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		4	A
I_B	Base current		1	A
P_C	Collector power dissipation	$T_C=25^{\circ}C$	30	W
T_j	Junction temperature		150	$^{\circ}C$
T_{stg}	Storage temperature		-55~150	$^{\circ}C$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=25\text{mA}; I_B=0$	70			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1\text{mA}; I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=2\text{A}; I_B=0.2\text{A}$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=2\text{A}; I_B=0.2\text{A}$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=70\text{V}; I_E=0$			0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5\text{V}; I_C=0$			0.1	mA
h_{FE}	DC current gain	$I_C=0.5\text{A}; V_{CE}=5\text{V}$	40		240	
f_T	Transition frequency	$I_C=0.5\text{A}; V_{CE}=10\text{V}$	3			MHz

◆ h_{FE} classifications

O	R	Y
40-80	70-140	120-240

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PACKAGE OUTLINE

