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

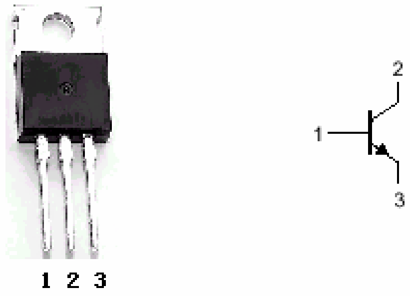

Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings (Ta=25?)

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?	30	W
T_j	Junction temperature		150	?
T_{stg}	Storage temperature		-55~150	?

CHARACTERISTICS

Tj=25? unless otherwise specified

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

u **h_{FE} classifications**

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

PACKAGE OUTLINE

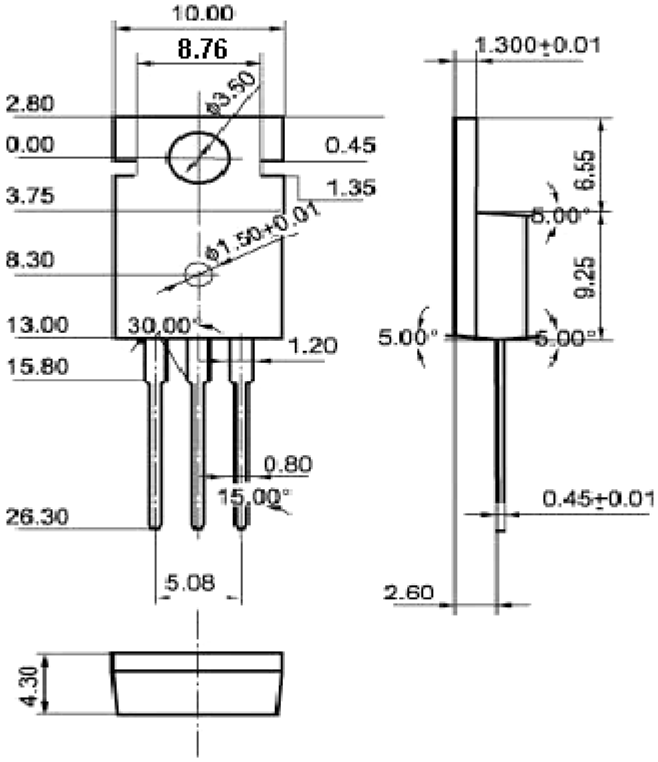

Fig.2 Outline dimensions (unindicated tolerance:±0.10 mm)