

Silicon NPN Power Transistors

2SC2832 2SC2832A

DESCRIPTION

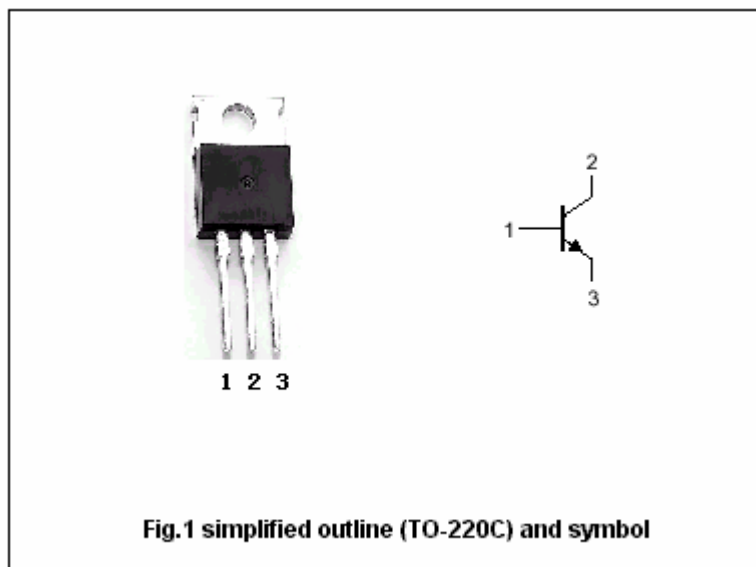
- With TO-220 package
- Low collector saturation voltage
- High V_{CBO}
- High speed switching

APPLICATIONS

- For high speed switching applications

PINNING

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

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SC2832	Open emitter	800	V
		2SC2832A		900	
V_{CEO}	Collector-emitter voltage		Open base	500	V
V_{EBO}	Emitter-base voltage		Open collector	8	V
I_C	Collector current			5	A
I_{CM}	Collector current-peak			10	A
I_B	Base current			3	A
P_C	Collector power dissipation		$T_C=25$	40	W
T_j	Junction temperature			150	
T_{stg}	Storage temperature			-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage		I _C =0.2A; L=25mH	500			V
V _{CEsat}	Collector-emitter saturation voltage		I _C =3A; I _B =0.6A			1.0	V
V _{BEsat}	Base-emitter saturation voltage		I _C =3A; I _B =0.6A			1.5	V
I _{CBO}	Collector cut-off current	2SC2832	V _{CB} =800V; I _E =0			100	μA
		2SC2832A	V _{CB} =900V; I _E =0				
I _{EBO}	Emitter cut-off current		V _{EB} =5V; I _C =0			100	μA
h _{FE-1}	DC current gain		I _C =0.1A; V _{CE} =5V	15			
h _{FE-2}	DC current gain		I _C =3A; V _{CE} =5V	8			
f _T	Transition frequency		I _C =0.5A; V _{CE} =10V		3		MHz

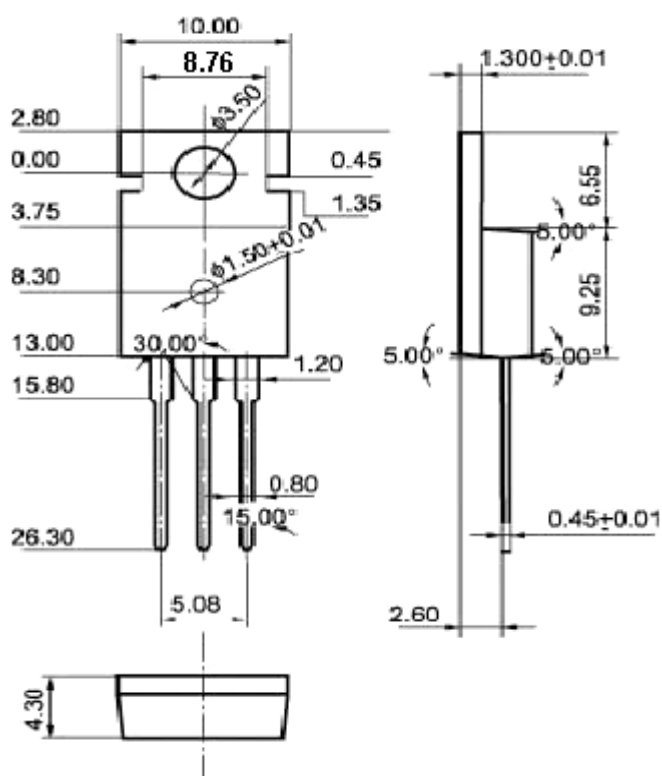
Switching times

t _{on}	Turn-on time	2SC2832	I _C =3A ; I _{B1} =-I _{B2} =-0.6A V _{CC} =200V			1.0	μ s
		2SC2832A				1.2	
t _{stg}	Storage time					3.0	μ s
t _f	Fall time	2SC2832				1.0	μ s
		2SC2832A				1.2	

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PACKAGE OUTLINE

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