

Inchange Semiconductor

Product Specification

Silicon NPN Power Transistors

2SC2832 2SC2832A

DESCRIPTION

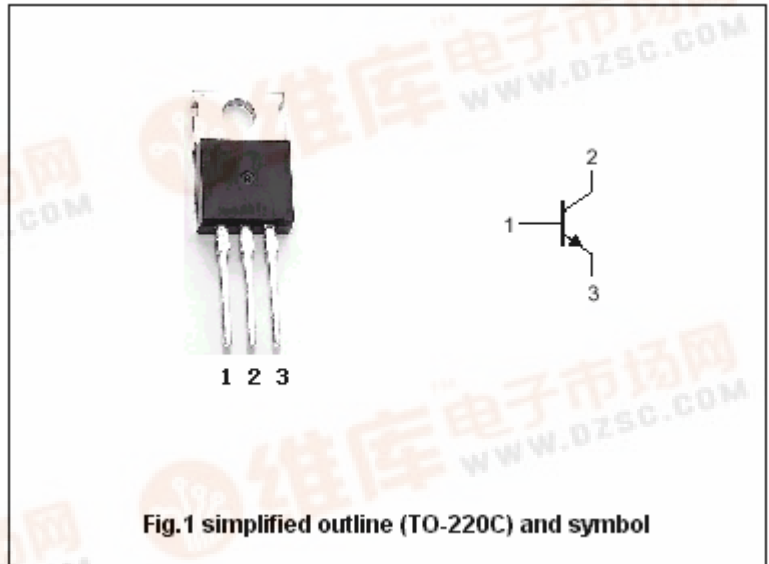
- With TO-220 package
- Low collector saturation voltage
- High V_{CBO}
- High speed switching

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	Open emitter	800	V
			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

Tj=25 unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	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	μs
		2SC2832A				1.2	
t_{stg}	Storage time					3.0	μs
t_f	Fall time	2SC2832				1.0	μs
		2SC2832A				1.2	

2SC2832 2SC2832A

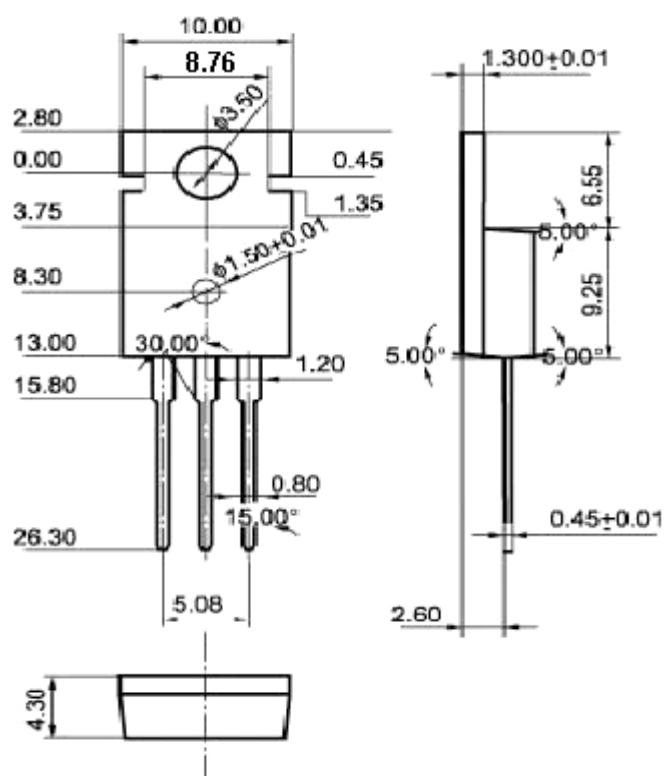


Fig.2 outline dimensions (unindicated tolerance: ± 0.10 mm)