Silicon NPN Power Transistors BD941

DESCRIPTION

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

APPLICATIONS

·For power switching applications

PINNING

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



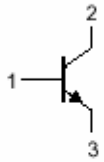


Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	140	V
V_{CEO}	Collector-emitter voltage	Open base	140	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		3	A
I_{CM}	Collector current-Peak		6	A
P_C	Collector dissipation	T_C=25□	30	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-50~150	□

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA; I_B=0	140			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=1mA; I_C=0	7			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=1A; I_B=0.2A			0.7	V
V_{BEsat}	Base-emitter saturation voltage	I_C=1A; I_B=0.2A			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=140V; I_E=0			50	μA
I_{EBO}	Emitter cut-off current	V_{EB}=7V; I_C=0			50	μA
h_{FE-1}	DC current gain	I_C=0.2A ; V_{CE}=4V	40		250	
h_{FE-2}	DC current gain	I_C=1A ; V_{CE}=4V	15			
f_T	Transition frequency	I_C=0.25A ; V_{CE}=10V	3			MHz

PACKAGE OUTLINE

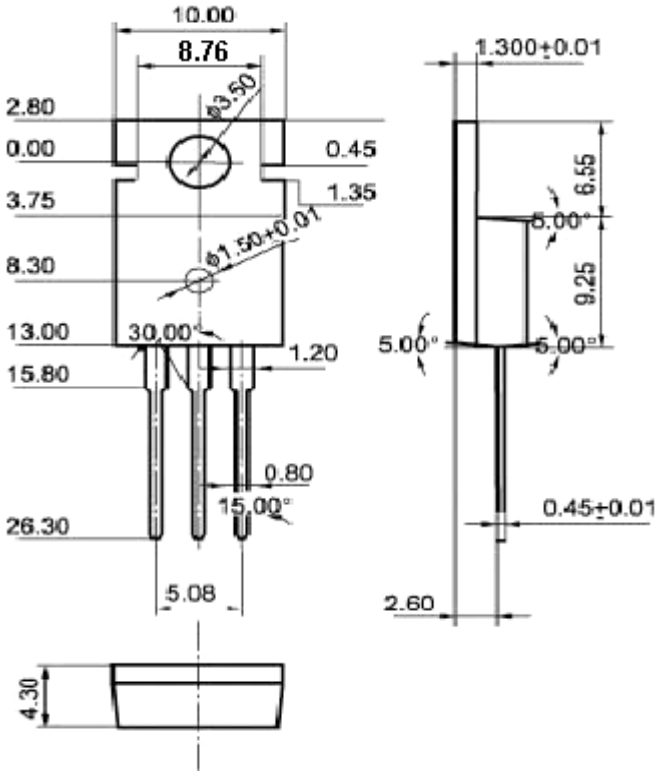


Fig.2 Outline dimensions (unindicated tolerance:±0.10mm)