Silicon NPN Power Transistors 2SC2305

DESCRIPTION

·

· With TO-3PN package
· High breakdown voltage
· Fast switching speed
· Wide safe operating area

APPLICATIONS

· For switching regulator applications

PINNING

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

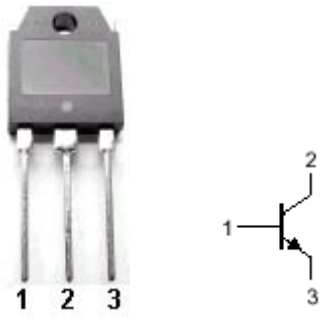


Fig.1 simplified outline (TO-3PN) and symbol

Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	400	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	8	V
I_C	Collector current (DC)		7	A
I_{CP}	Collector current (Pulse)		14	A
I_B	Base current (DC)		3	A
P_C	Collector power dissipation	T_C=25℃	80	W
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

Silicon NPN Power Transistors 2SC2305

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEO}	Collector-emitter breakdown voltage	I_C=10mA ;R_{BE}=∞	400			V
V_{CBO}	Collector-base breakdown voltage	I_C=1m A; I_E=0	400			V
V_{EBO}	Emitter-base breakdown voltage	I_E=1m A; I_C=0	7			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=4A; I_B=0.8A			1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=4A; I_B=0.8A			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=400V; I_E=0			10	μ A
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			10	μ A
h_{FE-1}	DC current gain	I_C=0.8A ; V_{CE}=5V	15		50	
h_{FE-2}	DC current gain	I_C=4A ; V_{CE}=5V	8			

Silicon NPN Power Transistors 2SC2305

PACKAGE OUTLINE

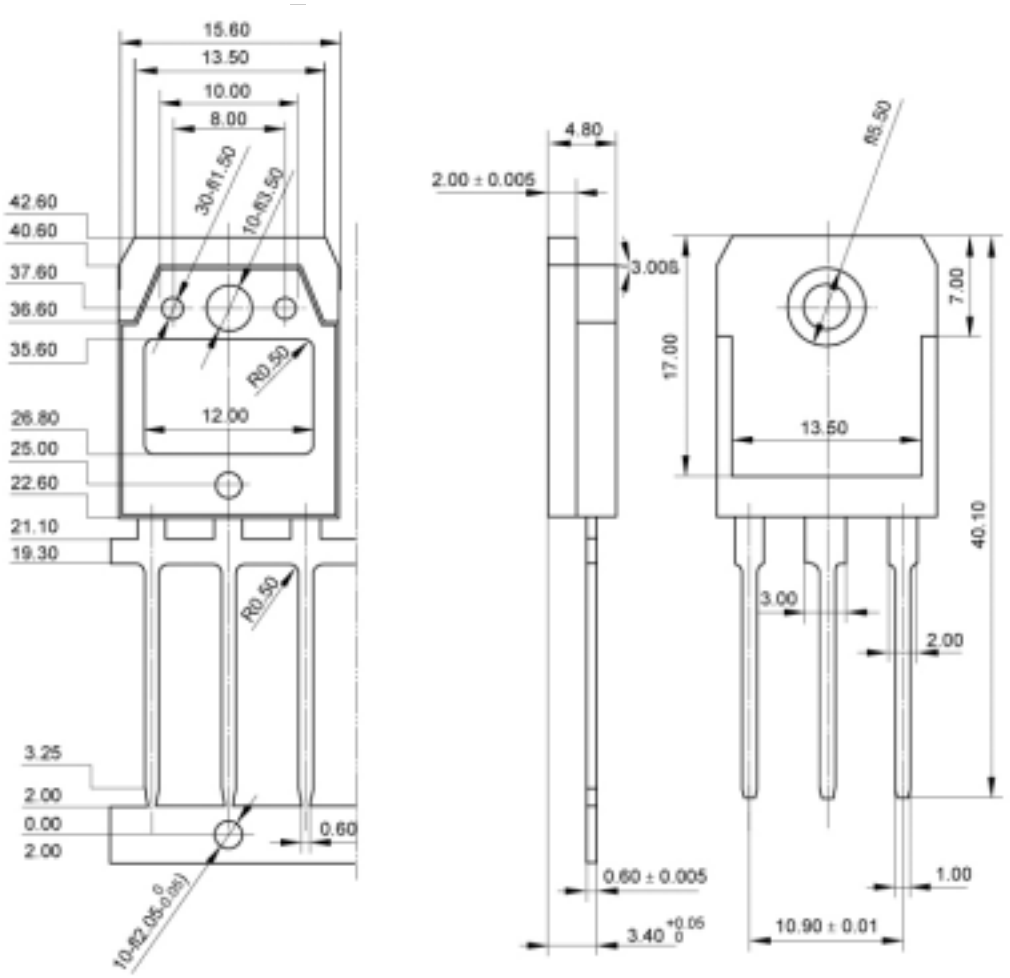


Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)