Silicon NPN Power Transistors 2SC4237

DESCRIPTION

·With TO-247 package
·Switching power transistor
·High breakdown voltage

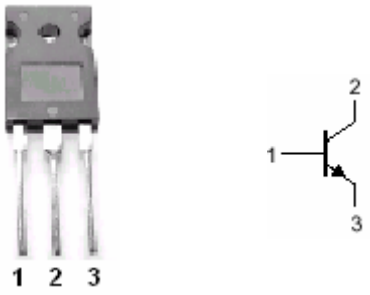


Fig.1 simplified outline (TO-247) and symbol

PINNING

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

Absolute maximum ratings(Tc=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1200	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current (DC)		10	A
I_{CM}	Collector current-Peak		20	A
I_B	Base current		4	A
I_{BM}	Base current-Peak		8	A
P_D	Total power dissipation	T_C=25□	150	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}C}$	Thermal resistance junction to case	0.83	□/W

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.2A; I_B=0	800			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=5A ;I_B=1A			1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=5A ;I_B=1A			1.5	V
I_{CBO}	Collector cut-off current	At rated voltage			0.1	mA
I_{CEO}	Collector cut-off current					
I_{EBO}	Emitter cut-off current	At rated voltage			0.1	mA
h_{FE-1}	DC current gain	I_C=5A ; V_{CE}=5V	8			
h_{FE-2}	DC current gain	I_C=1mA ; V_{CE}=5V	5			
f_T	Transition frequency	I_C=1A ; V_{CE}=10V		8		MHz
Switching times resistive load						
t_{on}	Turn-on time	I_C=5A I_{B1}=1A; I_{B2}=2A V_{BB2}=4V ,R_L=50Ω			0.5	μs
t_s	Storage time				3.5	μs
t_f	Fall time				0.3	μs

PACKAGE OUTLINE

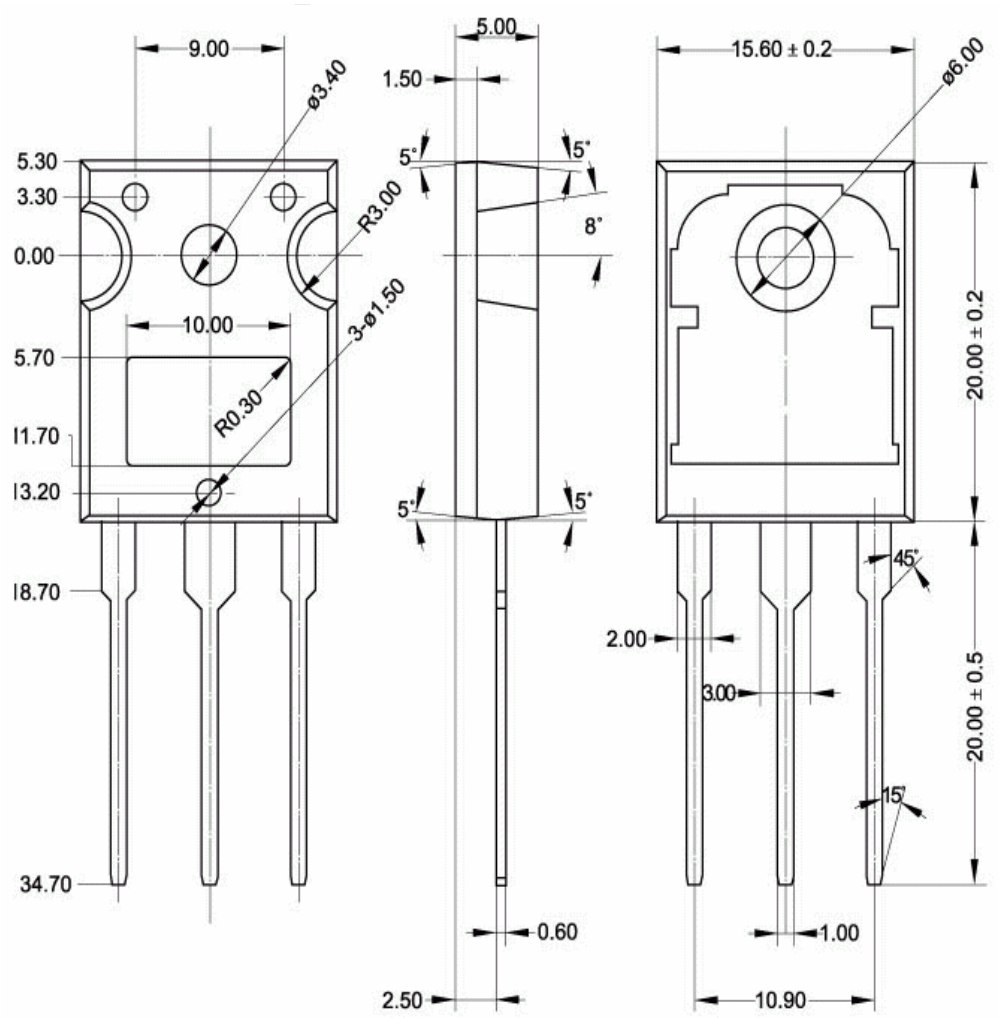


Fig.2 Outline dimensions