

Silicon NPN Power Transistors

2SC3214

DESCRIPTION

- With TO-3 package
- High voltage ,high speed

APPLICATIONS

- For switching regulator and DC/DC converter applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



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

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

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		5	A
I_{CM}	Collector current-peak		8	A
I_B	Base current		3	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	80	W
T_j	Junction temperature		200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-mb}$	Thermal resistance from junction to mounting base	1.0	$^\circ\text{C}/\text{W}$

Silicon NPN Power Transistors**2SC3214****CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA ; I _B =0	800			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA ; I _E =0	1200			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2.5A; I _B =0.5A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2.5A; I _B =0.5A			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =960V; I _E =0			10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			10	μA
h _{FE}	DC current gain	I _C =1.5A ; V _{CE} =5V	10			

Silicon NPN Power Transistors

2SC3214

PACKAGE OUTLINE

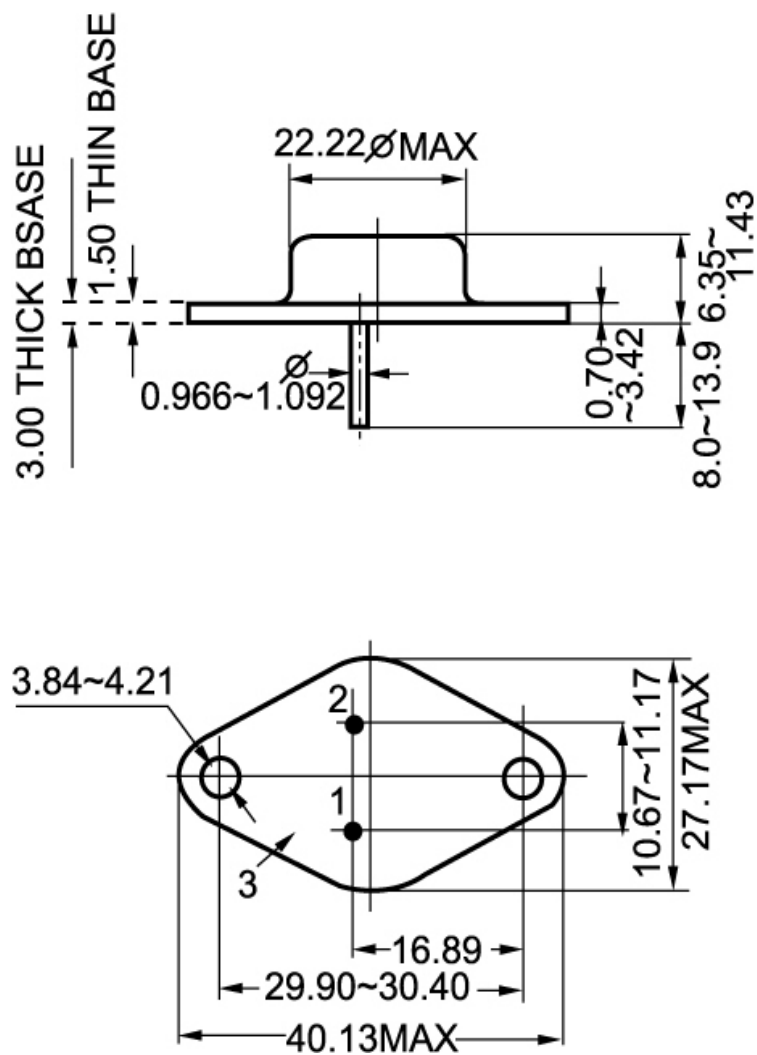


Fig.2 Outline dimensions