Silicon NPN Power Transistors 2SC3159

DESCRIPTION

- With TO-220F package
- High voltage
- High switching speed

APPLICATIONS

- For switching regulator applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

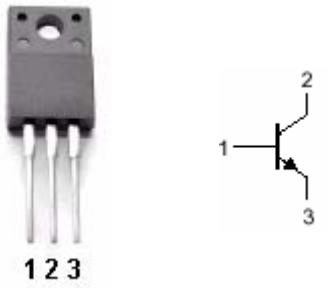

Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	500	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		20	A
I_B	Base current		3.5	A
P_C	Collector dissipation	T_C=25℃	80	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
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA ; I_B=0	400			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=1mA ; I_E=0	500			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=1mA ; I_C=0	7			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=6A; I_B=1.2A			1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=6A; I_B=1.2A			1.2	V
I_{CBO}	Collector cut-off current	V_{CB}=400V ;I_E=0			10	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			10	μA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=5V	15		80	
h_{FE-2}	DC current gain	I_C=6A ; V_{CE}=5V	10			

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PACKAGE OUTLINE

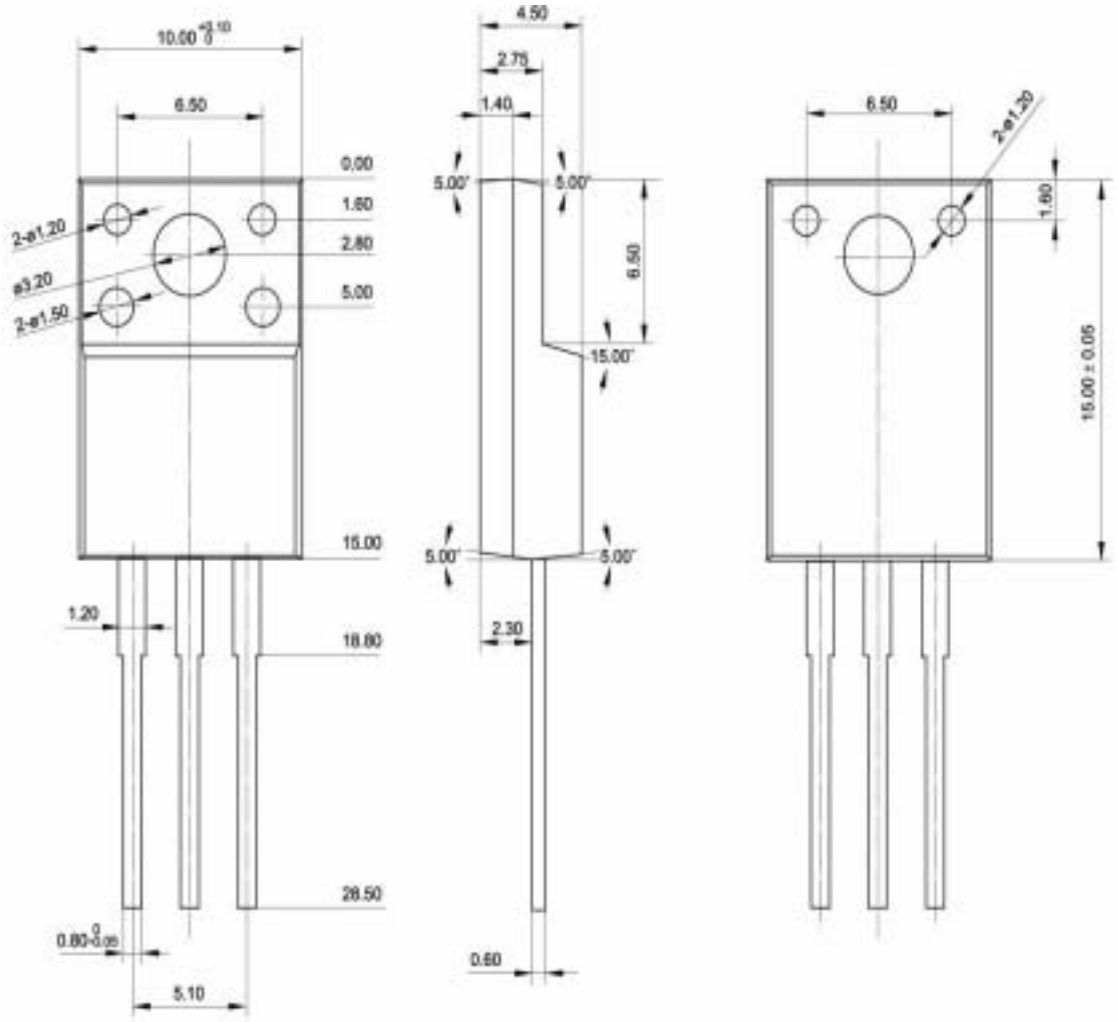

Fig.2 outline dimensions