Silicon NPN Power Transistors 2SC2791

DESCRIPTION

·With TO-3 package
·High collector breakdown voltage
·Excellent switching times

APPLICATIONS

·High speed and high voltage switching
·Switching regulator
·High speed DC-DC converter

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

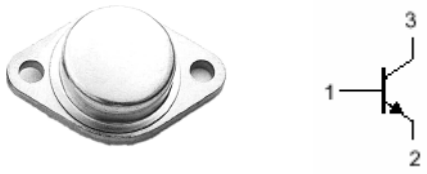

Fig.1 simplified outline (TO-3) and symbol

ABSOLUTE MAXIMUM RATINGS(T_C=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	900	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_B	Base current		3	A
P_C	Collector power dissipation	T_C=25□	100	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	800			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=1mA ;I_E=0	900			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=3A; I_B=0.6A			1.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=3A; I_B=0.6A			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=800V; I_E=0			100	μA
I_{EBO}	Emitter cut-off current	V_{EB}=7V; I_C=0			1	mA
h_{FE-1}	DC current gain	I_C=10mA ; V_{CE}=5V	10			
h_{FE-2}	DC current gain	I_C=3A ; V_{CE}=5V	10			

Switching times

t_r	Rise time	V_{CC}=400V ,I_C=3A, I_{B1}=0.3A;I_{B2}=-0.8A			1.0	μs
t_{stg}	Storage time				3.5	μs
t_f	Fall time				1.0	μs

PACKAGE OUTLINE

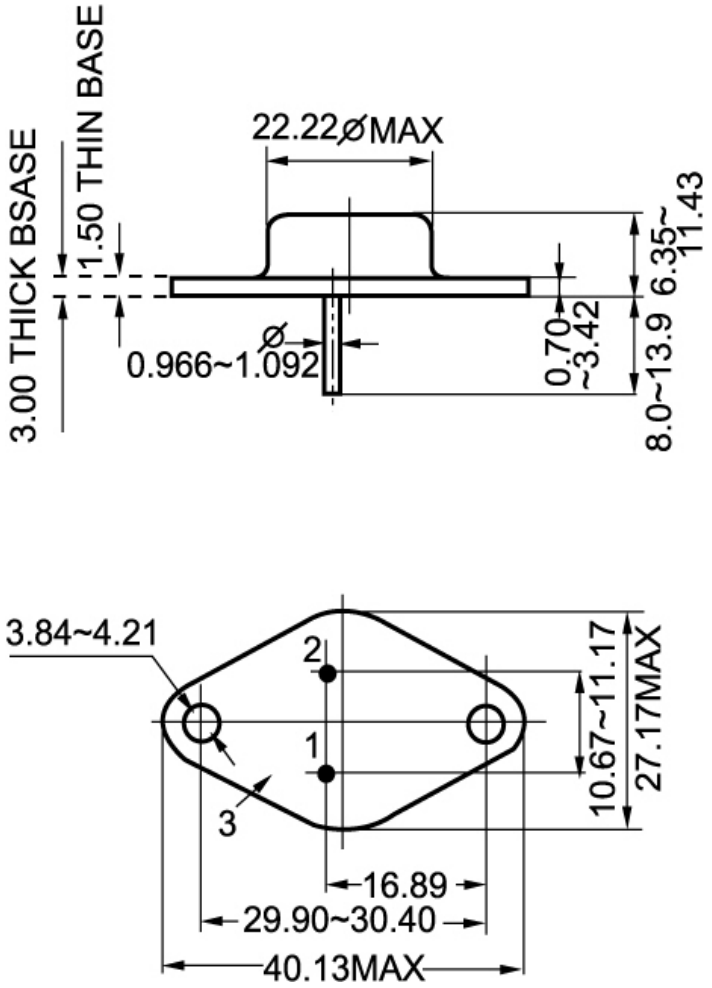

Fig.2 outline dimensions (unindicated tolerance:±0.1mm)