Silicon NPN Power Transistors 2SC2738

DESCRIPTION

·With TO-220C package
·High speed switching
·High V_{CBO}
·Low saturation voltage

APPLICATIONS

·For high speed switching applications

PINNING

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

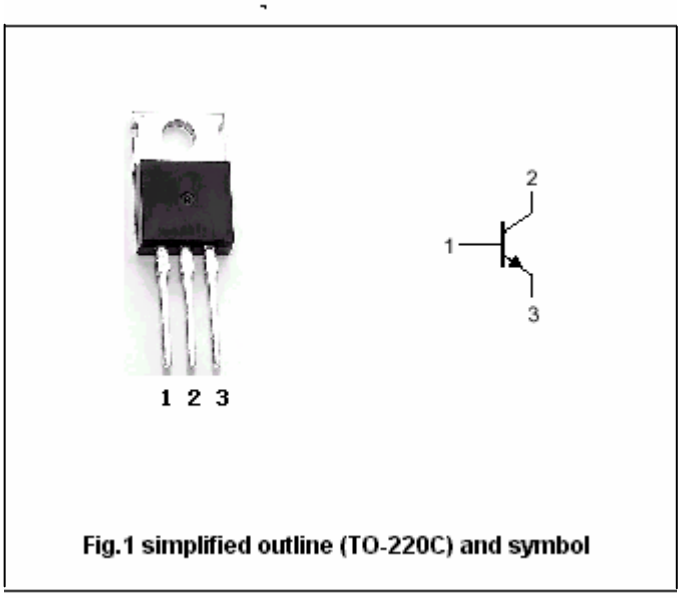

Fig.1 simplified outline (TO-220C) and symbol

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 (DC)		2	A
I_{CM}	Collector current-Peak		4	A
I_B	Base current		0.5	A
P_C	Collector power dissipation	T_C=25□	25	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
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.2A ;L=25mH	400			V
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=1A; I_B=0.2A			1.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=1A; I_B=0.2A			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=500V; I_E=0			100	μA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			100	μA
h_{FE-1}	DC current gain	I_C=0.1A ; V_{CE}=5V	15			
h_{FE-2}	DC current gain	I_C=1A ; V_{CE}=5V	8			
f_T	Transition frequency	I_C=0.2 A ; V_{CE}=10V		11		MHz
Switching times						
t_{on}	Turn-on time	V_{CC}=100V ,I_C=1A, I_{B1}=-I_{B2}=0.2A			1.0	μs
t_s	Storage time				3.0	μs
t_f	Fall time				1.0	μs

PACKAGE OUTLINE

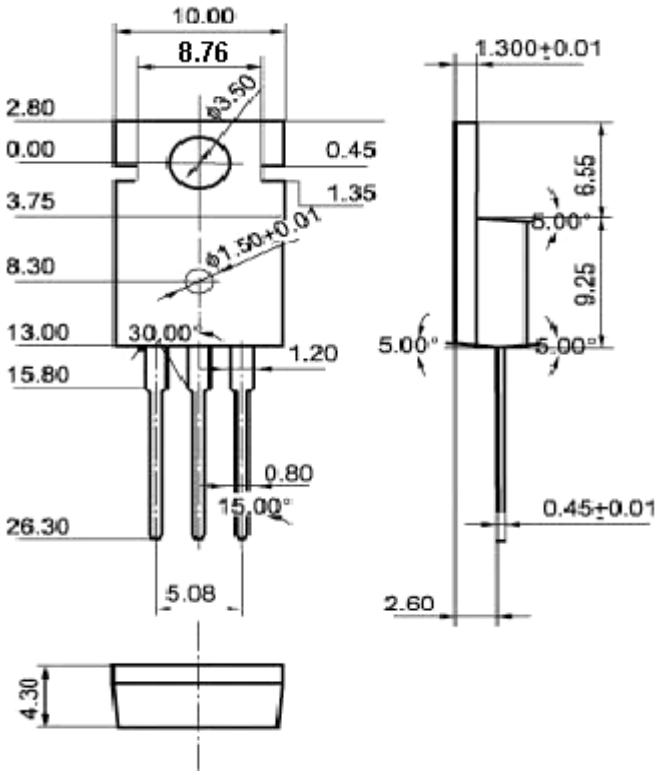

Fig.2 Outline dimensions (unindicated tolerance:±0.10mm)