

Silicon NPN Power Transistors

2SC2612

DESCRIPTION

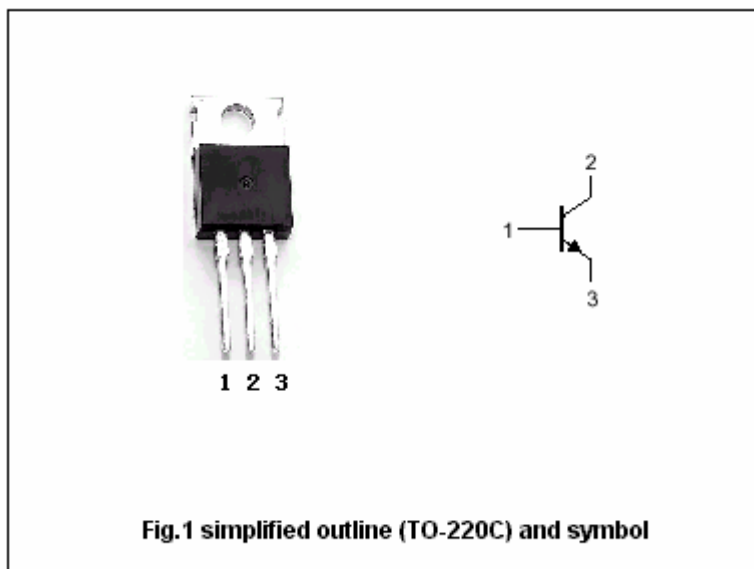
- With TO-220 package
- High collector breakdown voltage
: $V_{CEO}=400V(\text{Min})$

APPLICATIONS

- For high voltage ,high speed and high power switching applications

PINNING

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

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

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		3	A
I_{CM}	Collector current-Peak		6	A
I_B	Base current		1.5	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	30	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=0.2A, R_{BE}=\infty, L=100mH$	400			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10mA; I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=1.5A; I_B=0.3A$			1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=1.5A; I_B=0.3A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=400V; I_E=0$			100	μA
I_{CEO}	Collector cut-off current	$V_{CE}=350V; R_{BE}=\infty$			100	μA
h_{FE-1}	DC current gain	$I_C=1.5A; V_{CE}=5V$	15			
h_{FE-2}	DC current gain	$I_C=3A; V_{CE}=5V$	7			

Switching times

t_{on}	Turn-on time	$I_C=3.0A, I_{B1}=-I_{B2}=0.6A$ $V_{CC}\approx 150V$			1.0	μs
t_{stg}	Storage time			1.2	2.5	μs
t_f	Fall time				1.0	μs

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

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