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Product Specification

Silicon NPN Power Transistors — 2SC2245

DESCRIPTION

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

APPLICATIONS

·Power switching
·Power amplification
·power driver

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	450	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		20	A
P_T	Total power dissipation	T_{mb}=25℃	100	W
T_j	Junction temperature		200	℃
T_{stg}	Storage temperature		-65~200	℃

THERMAL CHARACTERISTICS

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

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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=0.1A ; L=25mH	400			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=4A; I_B=0.8A			1.2	V
V_{BEsat}	Base-emitter saturation voltage	I_C=4A; I_B=0.8A			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=450V; I_E=0 T_C=125			1 4	mA
I_{CEO}	Collector cut-off current	V_{CE}=400V; I_B=0			5.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=5V; I_C=0			1.0	mA
h_{FE}	DC current gain	I_C=4A ; V_{CE}=5V	10			

Switching times

t_{on}	Turn-on time	I_C=4A ;I_{B1}=- I_{B2}=0.8A			1.0	μs
t_s	Storage time				2.0	μs
t_f	Fall time				1.0	μs