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2SD2423

Silicon NPN Epitaxial, Darlington



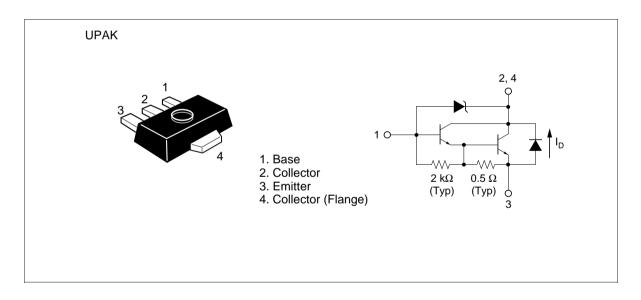
Application

Low frequency power amplifier

Features

The transistor with a built-in zener diode of surge absorb.

Outline



2SD2423

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	50	V
Collector to emitter voltage	V_{CEO}	50	V
Emitter to base voltage	V_{EBO}	7	V
Collector current	I _c	1.5	A
Collector power dissipation	P _C *1	1	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C
Collector to emitter diode forward current	I _D	1.5	A

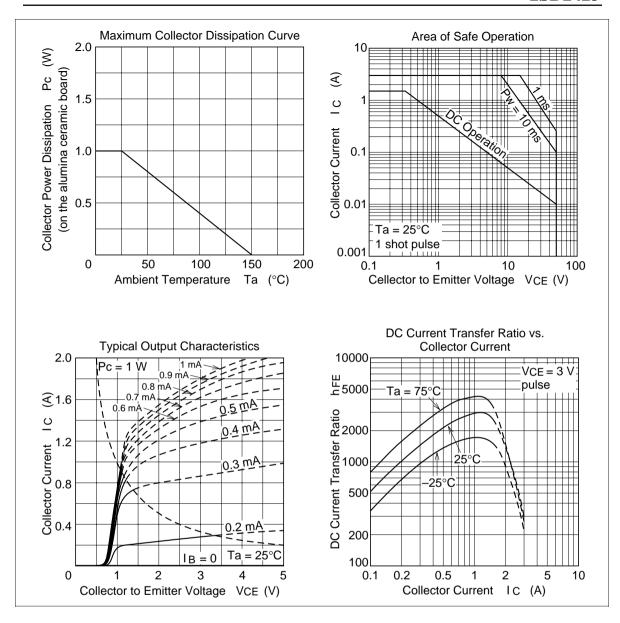
Note: 1. When using the ceramic board 0.7 mm thick (12.5 mm x 20 mm).

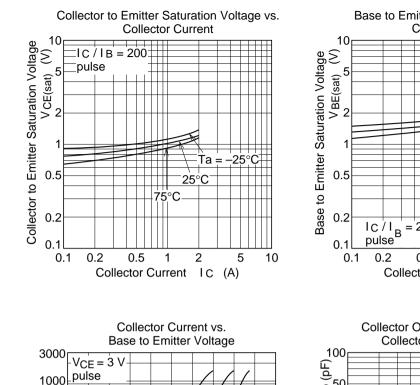
Electrical Characteristics (Ta = 25°C)

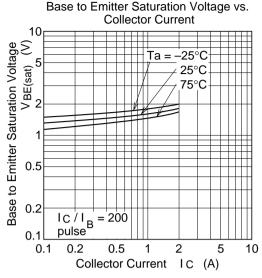
Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	50	_	70	V	$I_{c} = 100 \ \mu A, \ I_{e} = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	50	_	_	V	$I_{\rm C}$ = 10 mA, $R_{\rm BE}$ = ∞
Collector to emitter sustaining voltage	$V_{\text{CEO(sus)}}$	50	_	70	V	$I_{\rm C} = 1.5 \text{ A}, R_{\rm BE} = \infty,$ $L = 10 \text{ mH}^{*1}$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	7	_	_	V	$I_{\rm E} = 50 \text{ mA}, I_{\rm C} = 0$
Collector cutoff current	I _{CEO}	_	_	10	μΑ	$V_{CE} = 40 \text{ V}, R_{BE} = \infty$
DC current transfer ratio	h _{FE}	2000	_	10000		$V_{CE} = 3 \text{ V}, I_{C} = 1 \text{ A}^{*1}$
Collector to emitter saturation voltage	$V_{\text{CE}(\text{sat})1}$	_	_	1.5	V	$I_{C} = 1 \text{ A}, I_{B} = 1 \text{ mA*}^{1}$
Collector to emitter saturation voltage	V _{CE(sat)2}	_	_	2.3	V	$I_{\rm C} = 1.5 \text{ A}, I_{\rm B} = 1.5 \text{ mA}^{*1}$
Base to emitter saturation voltage	$V_{BE(sat)1}$	_	_	2.0	V	$I_{C} = 1 \text{ A}, I_{B} = 1 \text{ mA}^{*1}$
Base to emitter saturation voltage	$V_{BE(sat)2}$	_	_	2.5	V	$I_{\rm C} = 1.5 \text{ A}, I_{\rm B} = 1.5 \text{ mA}^{*1}$
Emitter to collector diode forward voltage	V _D	_	_	3.5	V	I _D = 1.5 A*1

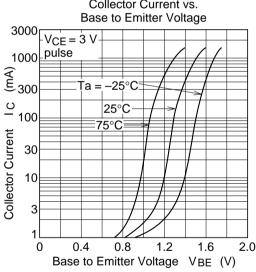
Notes: 1. Pulse test

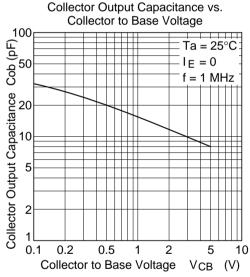
2. Marking is "GT".











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