

Silicon NPN Power Transistors

2SC3423

DESCRIPTION

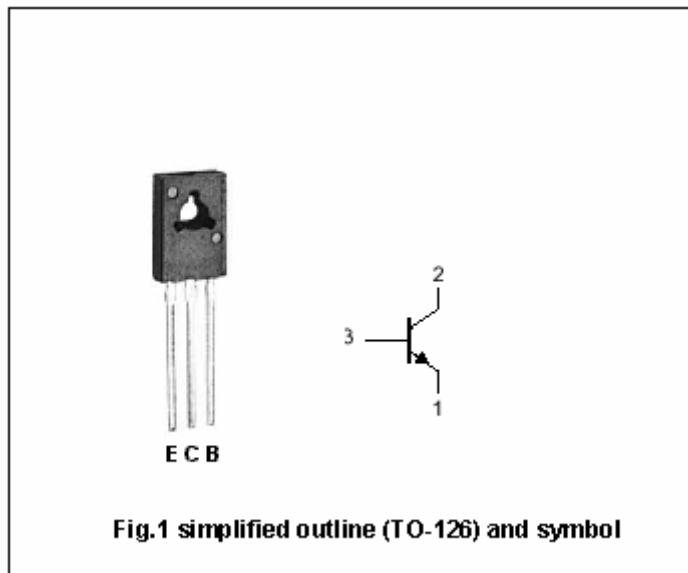
- With TO-126 package
- Complement to type 2SA1360
- High transition frequency

APPLICATIONS

- Audio frequency amplifier applications

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	150	V
V_{CEO}	Collector-emitter voltage	Open base	150	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		50	mA
I_B	Base current		5	mA
P_D	Total power dissipation	$T_a=25^\circ\text{C}$	1.2	W
		$T_C=25^\circ\text{C}$	5	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		$-55^\circ\text{C}+150^\circ\text{C}$	$^\circ\text{C}$

Silicon NPN Power Transistors**2SC3423****CHARACTERISTICS**

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA ; I_B=0$	150			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=10mA ; I_B=1mA$			1.0	V
V_{BE}	Base-emitter on voltage	$I_C=10mA ; V_{CE}=5V$			0.8	V
I_{CBO}	Collector cut-off current	$V_{CB}=150V ; I_E=0$			0.1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			0.1	μA
h_{FE}	DC current gain	$I_C=10mA ; V_{CE}=5V$	80		240	
C_{ob}	Output capacitance	$I_E=0 ; V_{CB}=10V f=1MHz$		1.8		pF
f_T	Transition frequency	$I_C=10mA ; V_{CE}=5V$		200		MHz

◆ **h_{FE} Classifications**

O	Y
80-160	120-240

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PACKAGE OUTLINE

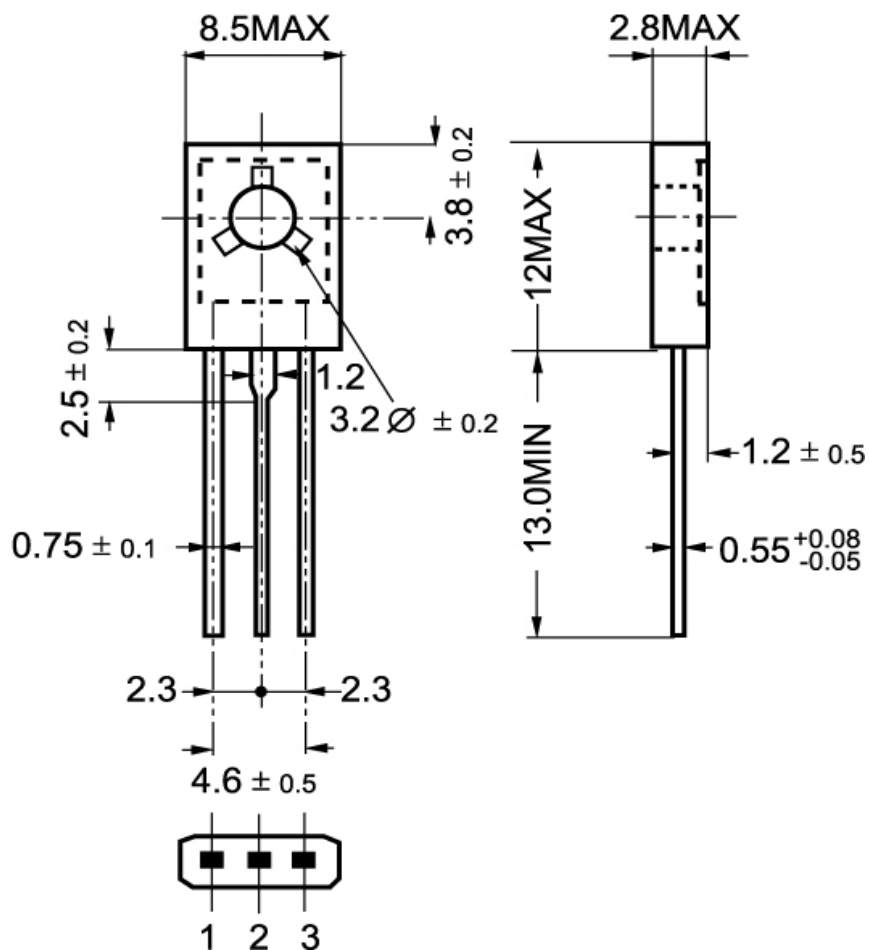


Fig.2 Outline dimensions

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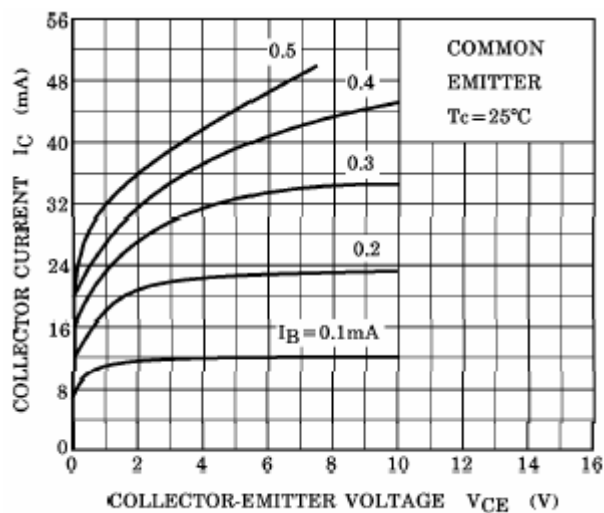


Fig.3 Static Characteristic

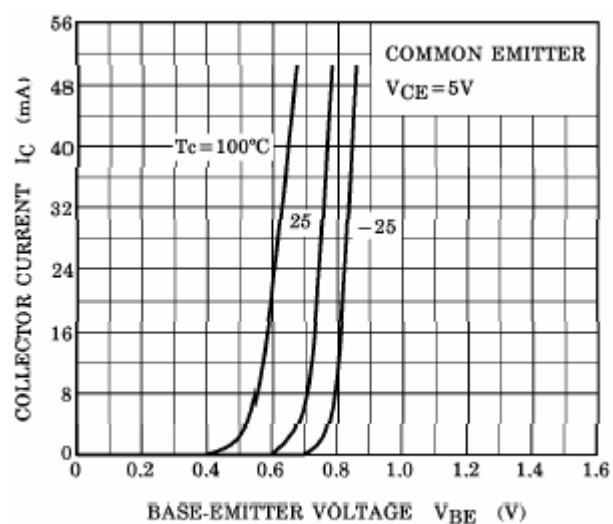
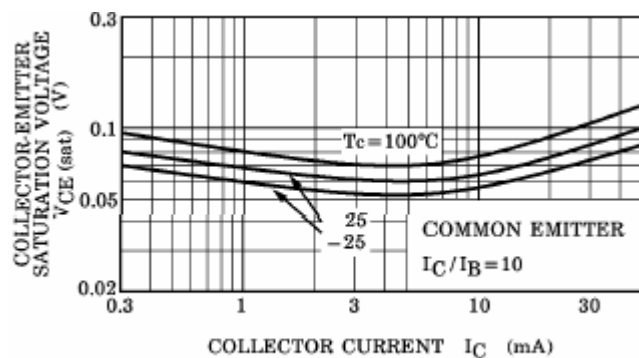
Fig.4 $I_C - V_{BE}$ 

Fig.5 Collector-Emitter Saturation Voltage

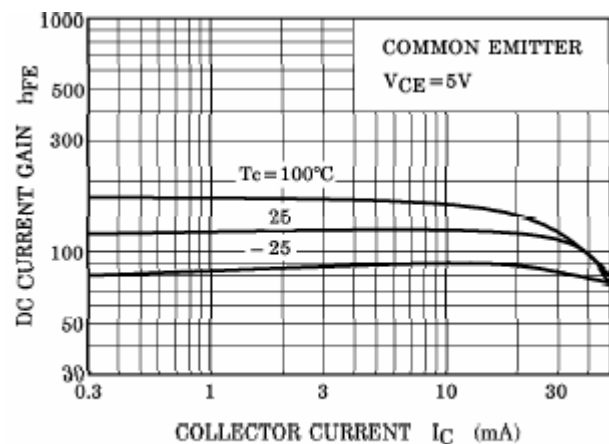


Fig.6 DC current Gain

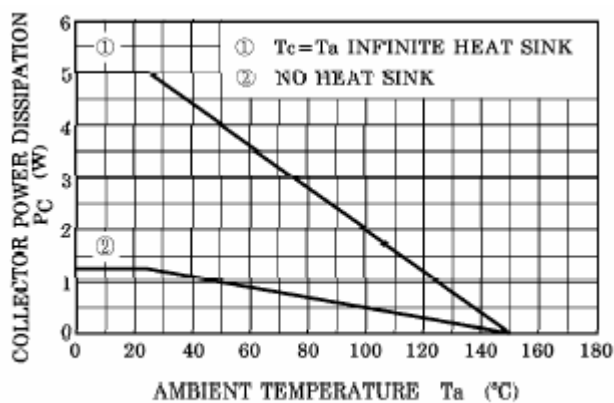


Fig.7 Power Derating