

Silicon NPN Power Transistors

2SC1226 2SC1226A

DESCRIPTION

- With TO-202 package
- Complement to type 2SA699/699A

APPLICATIONS

- For medium power amplifier applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

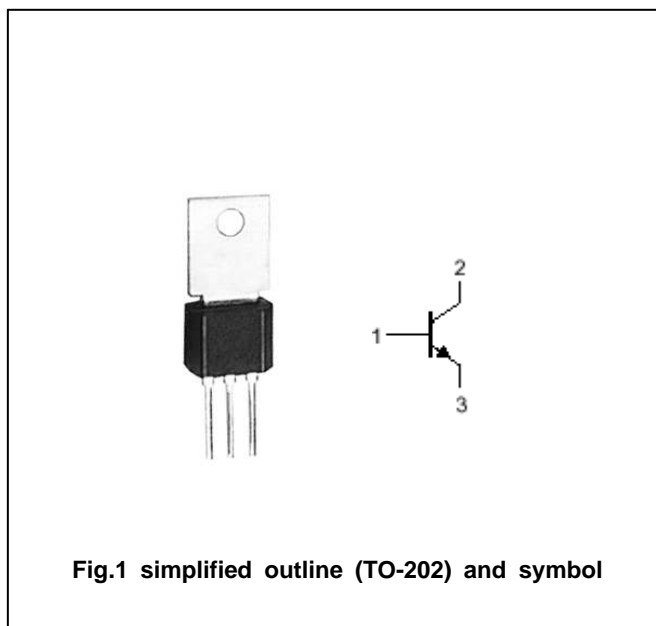


Fig.1 simplified outline (TO-202) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	2SC1226	40	V
		2SC1226A	50	
V_{CEO}	Collector-emitter voltage	2SC1226	32	V
		2SC1226A	40	
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		2	A
I_{CM}	Collector current-peak		3	A
I_B	Base current		0.6	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	10	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon NPN Power Transistors

2SC1226 2SC1226A

CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A ; I _B =0.2 A		0.4	1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2A ; I _B =0.2 A			1.5	V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =1mA; I _E =0	2SC1226	40		V
			2SC1226A	50		
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA; I _B =0	2SC1226	32		V
			2SC1226A	40		
I _{CBO}	Collector cut-off current	V _{CB} =20V; I _E =0			1	μ A
I _{CEO}	Collector cut-off current	V _{CE} =12V; I _B =0			100	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			100	μ A
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	50		220	
C _{OB}	Output capacitance	I _E =0; V _{CB} =5V; f=1MHz		50		pF
f _T	Transition frequency	I _E =0.5A ; V _{CB} =5V		150		MHz

◆ h_{FE} classifications

P	Q	R
50-100	80-160	100-220

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2SC1226 2SC1226A

PACKAGE OUTLINE

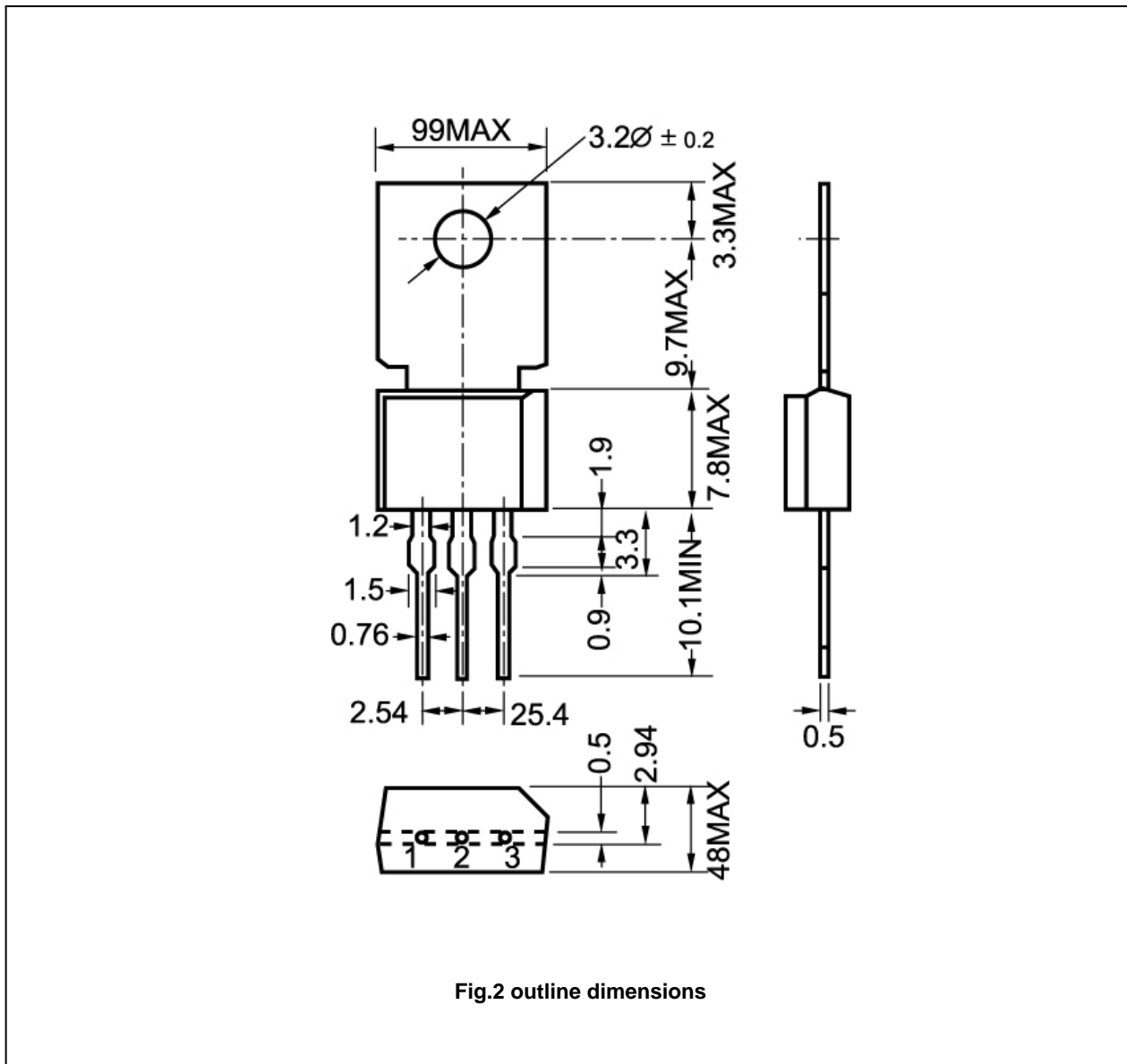


Fig.2 outline dimensions

Silicon NPN Power Transistors

2SC1226 2SC1226A

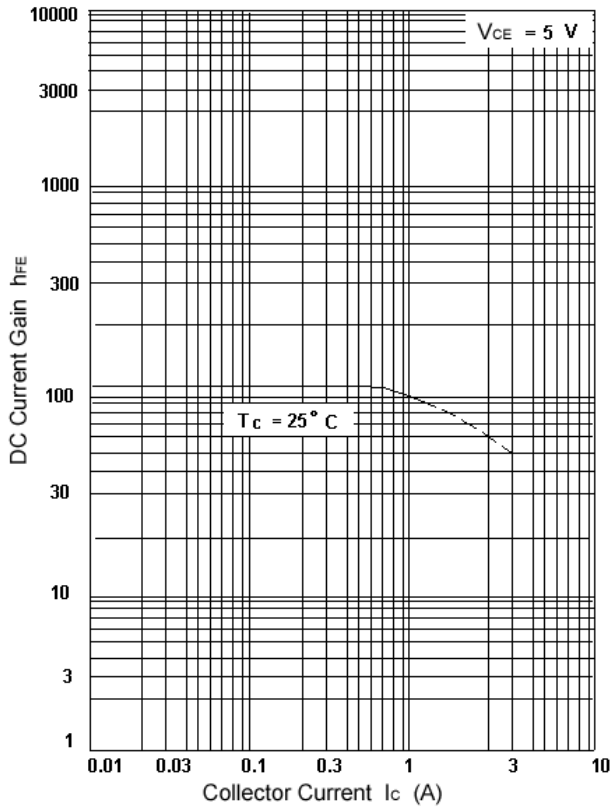


Fig.3 DC current Gain

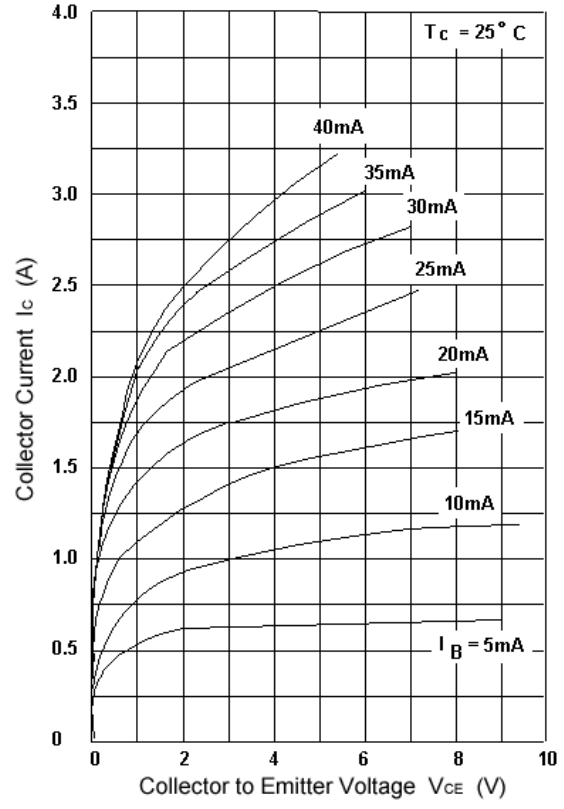


Fig.4 Static Characteristic

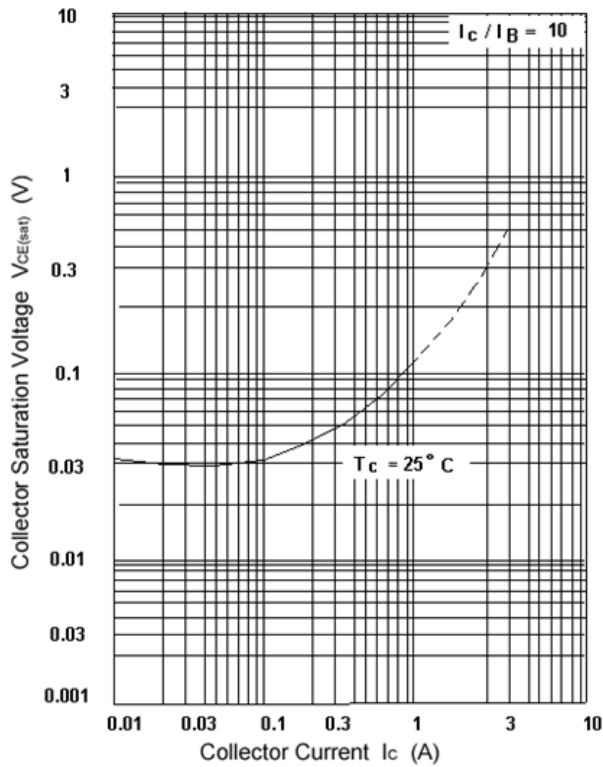


Fig.5 Collector-Emitter Saturation Voltage

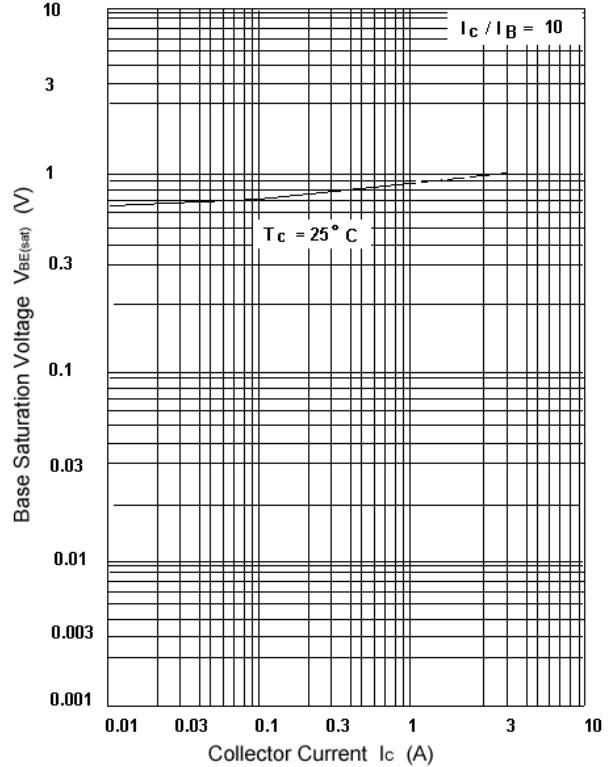


Fig.6 Base-Emitter Saturation Voltage

Silicon NPN Power Transistors

2SC1226 2SC1226A

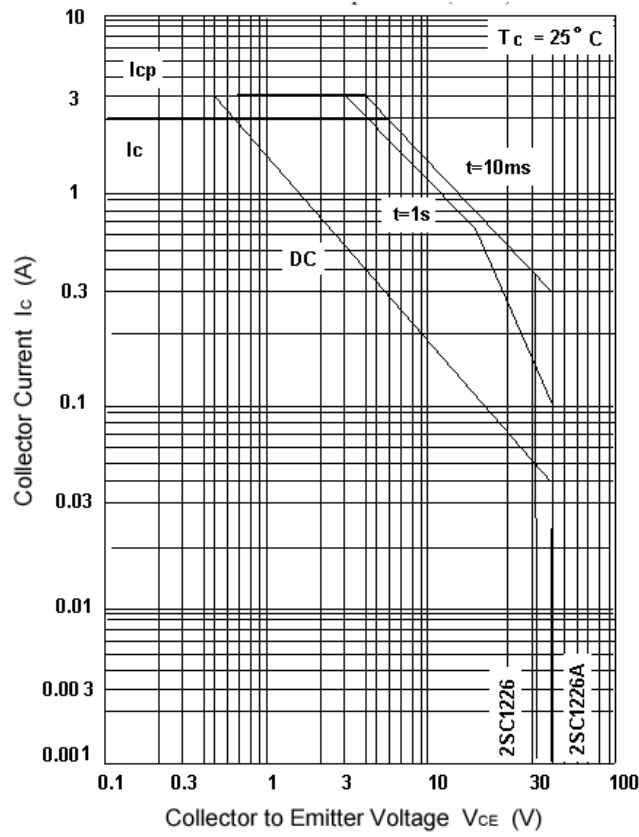


Fig.7 Safe Operating Area