

Silicon NPN Power Transistors

2SC4923

DESCRIPTION

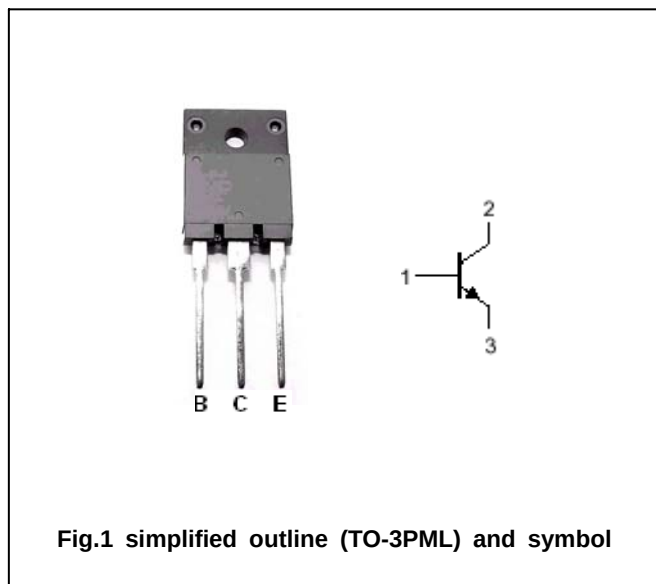
- With TO-3PML package
- High speed
- High reliability
- High breakdown voltage

APPLICATIONS

- High-definition CRT display horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1500	V
V_{CEO}	Collector-emitter voltage	Open base	800	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		8	A
I_{CP}	Collector current-peak		25	A
P_C	Collector power dissipation		3	W
		$T_C = 25^\circ\text{C}$	70	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

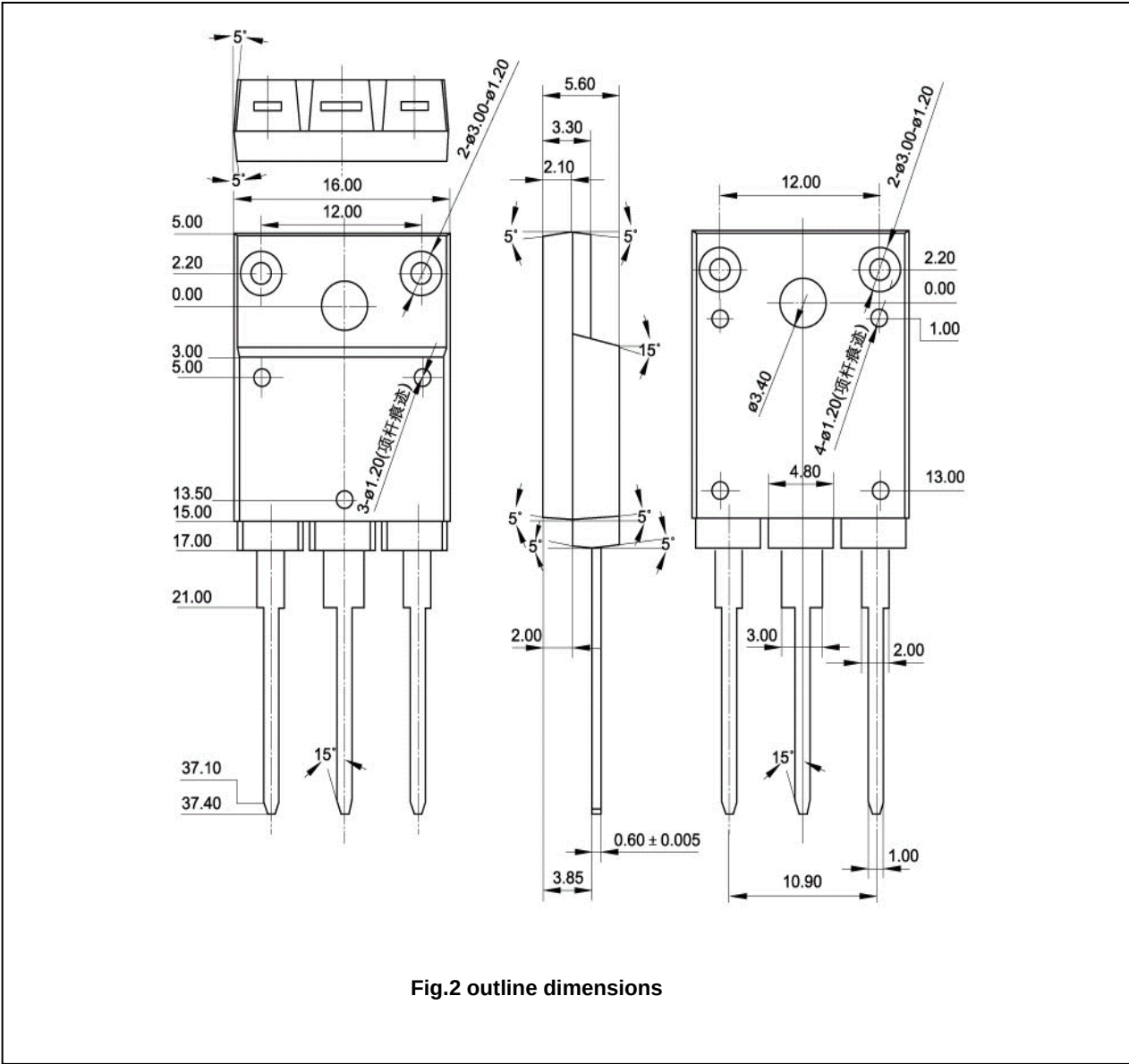
T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-emitter sustaining voltage	I _C =100mA ; I _B =0	800			V
I _{CBO}	Collector cut-off current	V _{CE} =800V; I _E =0			10	μ A
I _{CES}	Collector cut-off current	V _{EB} =1500V; R _{BE} =0			1.0	mA
I _{EBO}	Emitter cut-off current	V _{CE} =4V; I _C =0			1.0	mA
h _{FE-1}	DC current gain	I _C =1A ; V _{CE} =5V	8			
h _{FE-2}	DC current gain	I _C =6A ; V _{CE} =5V	4		8	
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =6A ; I _B =1.5A			5	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =6A ; I _B =1.5A			1.5	V
t _{stg}	Storage time	I _C =6A; I _{B1} =1.2A; I _{B2} =-2.4A			3	μ s
t _f	Fall time	I _C =6A; I _{B1} =1.2A; I _{B2} =-2.4A		0.1	0.2	μ s

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PACKAGE OUTLINE



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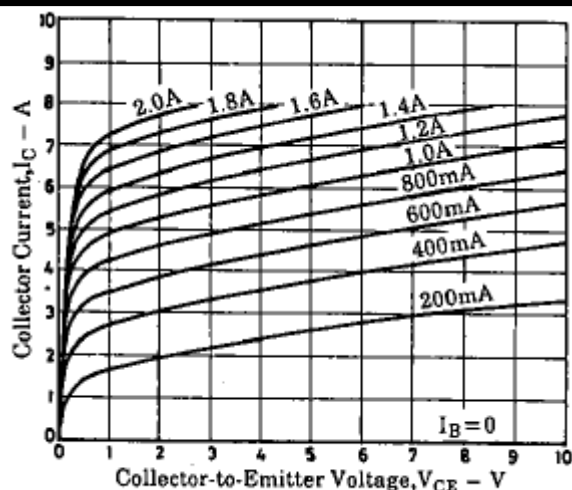


Fig.3 Static Characteristic

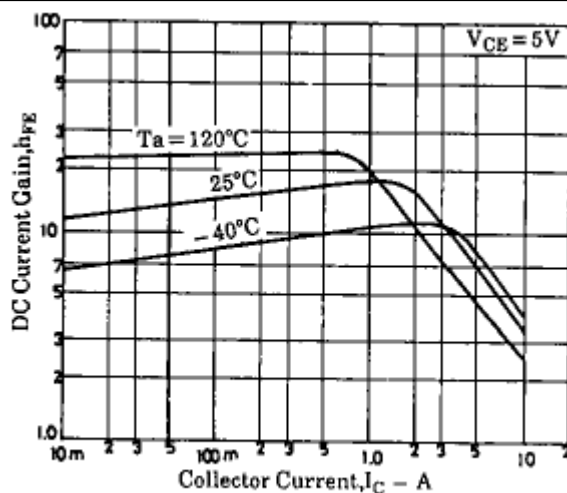


Fig.4 DC current Gain

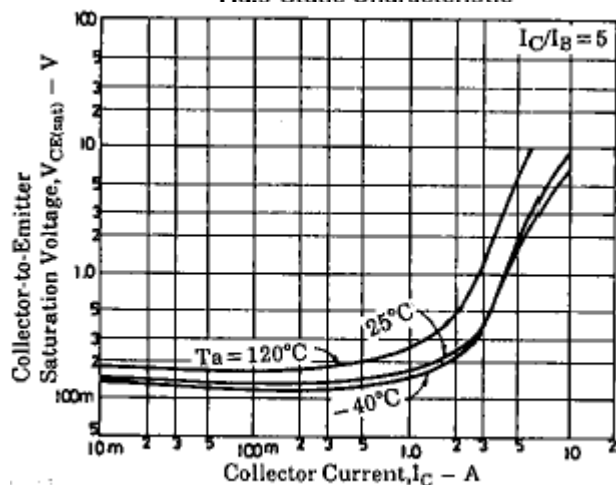


Fig.5 Collector-Emitter Saturation Voltage

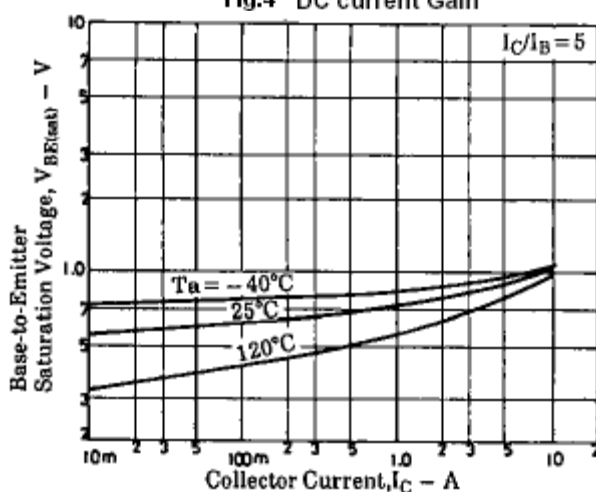


Fig.6 Base-Emitter Saturation Voltage

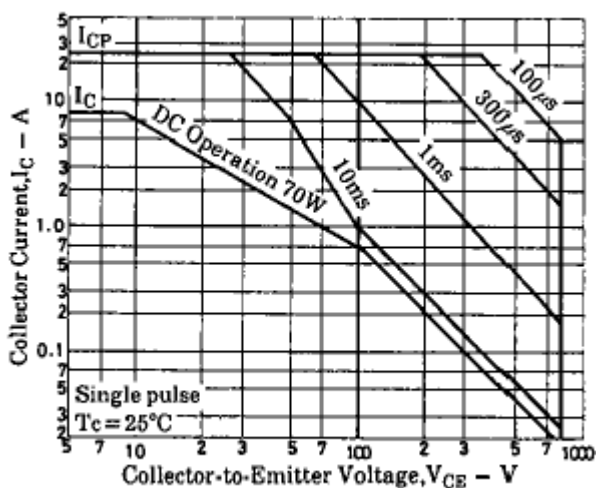


Fig.7 Safe Operating Area