Silicon NPN Power Transistors 2SC5297

DESCRIPTION

·With TO-3PML package
·High breakdown voltage, high reliability.
·High speed

APPLICATIONS

·Ultrahigh-definition CRT display
·Horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

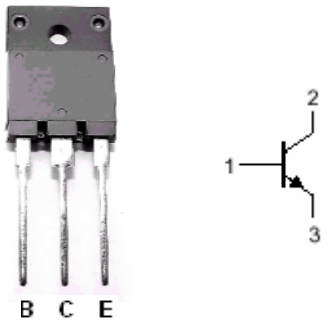

Fig.1 simplified outline (TO-3PML) and symbol

ABSOLUTE MAXIMUM RATINGS(T_C=25□)

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_{CM}	Collector current-peak		16	A
P_C	Collector power dissipation	T_C=25□	60	W
			3	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=5A;I_B=1.25 A			5.0	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=5A;I_B=1.25 A			1.5	V
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=100mA;I_B=0	800			V
I_{EBO}	Emitter cut-off current	V_{EB}=4V ;I_C=0			1.0	mA
I_{CBO}	Collector cut-off current	V_{CB}=800V; I_E=0			10	μA
I_{CES}	Collector cut-off current	V_{CE}=1500V; R_{BE}=0			1	mA
h_{FE-1}	DC current gain	I_C=1 A ; V_{CE}=5V	20		30	
h_{FE-2}	DC current gain	I_C=5A ; V_{CE}=5V	4		7	

Switching times

t_{stg}	Storage time	I_C=4A;R_L=50Ω I_{B1}=0.8A; I_{B2}=-1.6A V_{CC}=200V			3.0	μs
t_f	Fall time			0.1	0.2	μs

PACKAGE OUTLINE

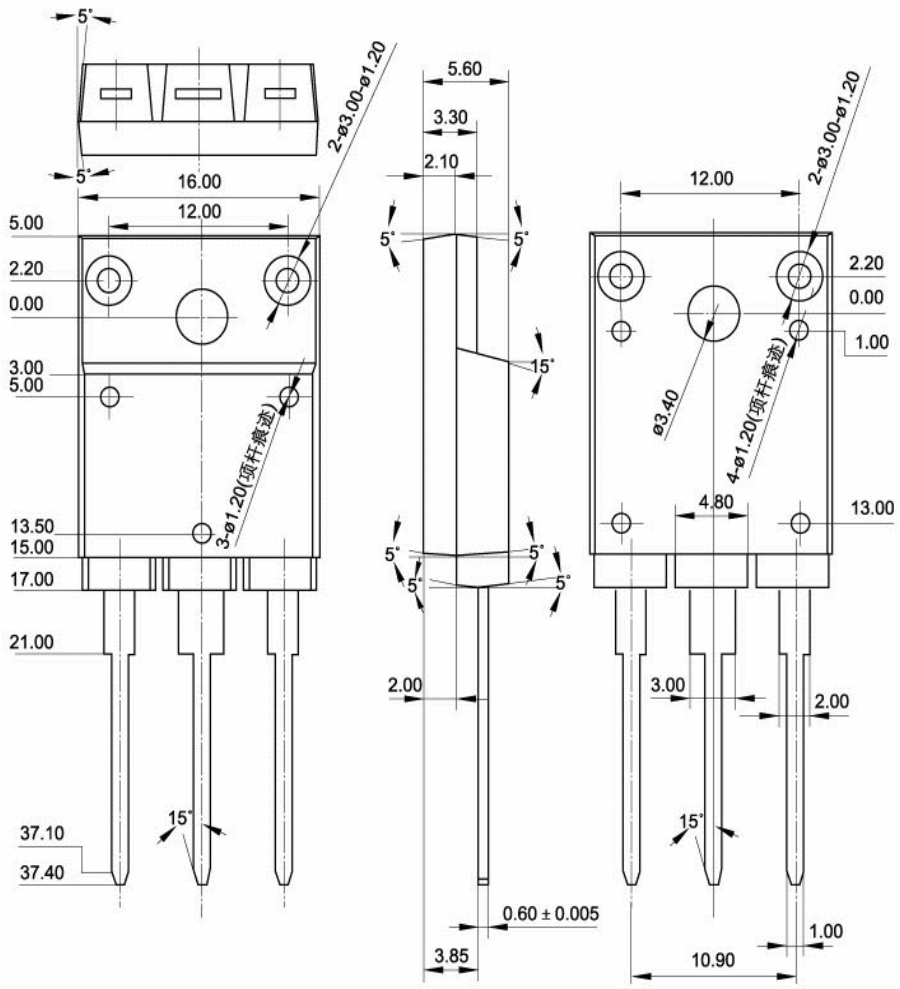

Fig.2 Outline dimensions

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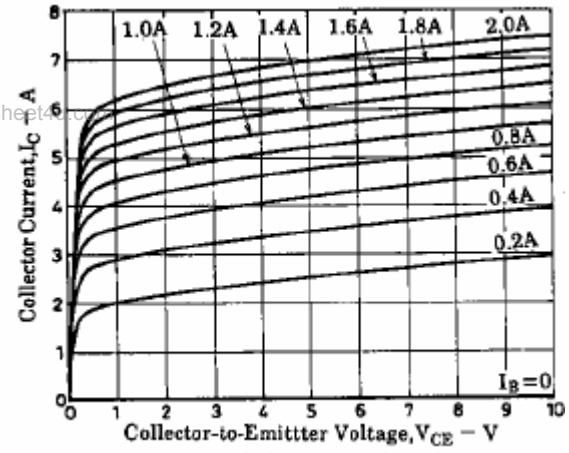

Fig.3 Static Characteristic

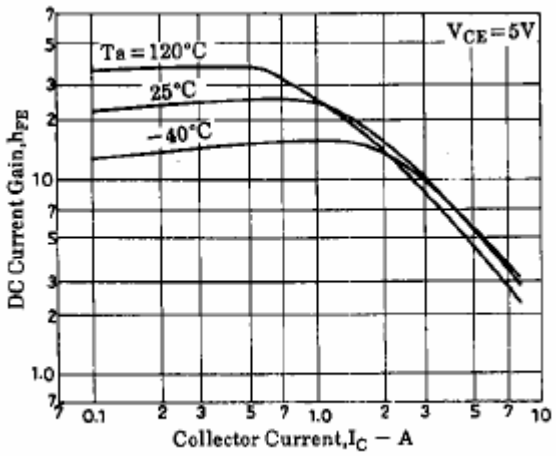

Fig.4 DC current Gain

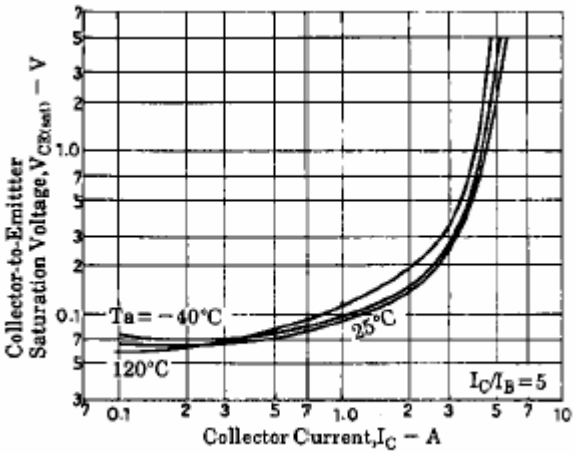

Fig.5 Collector-Emitter Saturation Voltage

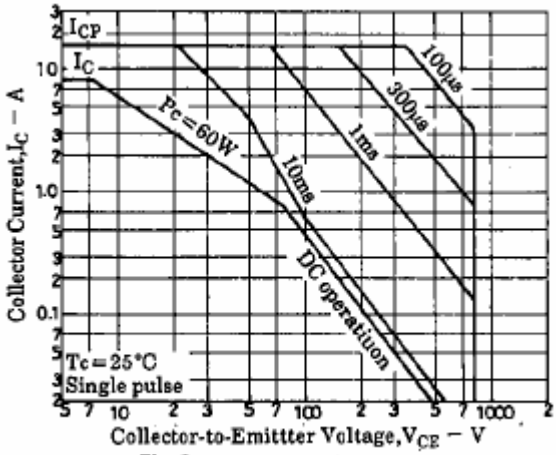

Fig.6 Safe Operating Area