Silicon NPN Power Transistors 2SC3894

DESCRIPTION

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

APPLICATIONS

·Ultrahigh-definition CRT display
horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

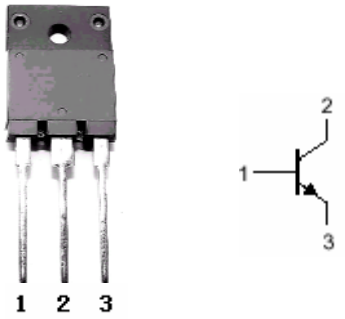


Fig.1 simplified outline (TO-3PML) and symbol

Absolute maximum ratings (Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	MAX	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		6	A
I_{CM}	Collector current-peak		16	A
P_C	Collector dissipation	Ta=25□	3.0	W
		T_C=25□	60	
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

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CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=0.1A ;I_B=0	800			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=4A ;I_B=1A			5.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=4A ;I_B=1A			1.5	V
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			1.0	mA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=5V	8			
h_{FE-2}	DC current gain	I_C=4A ; V_{CE}=5V	4		8	

Switching times

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

PACKAGE OUTLINE

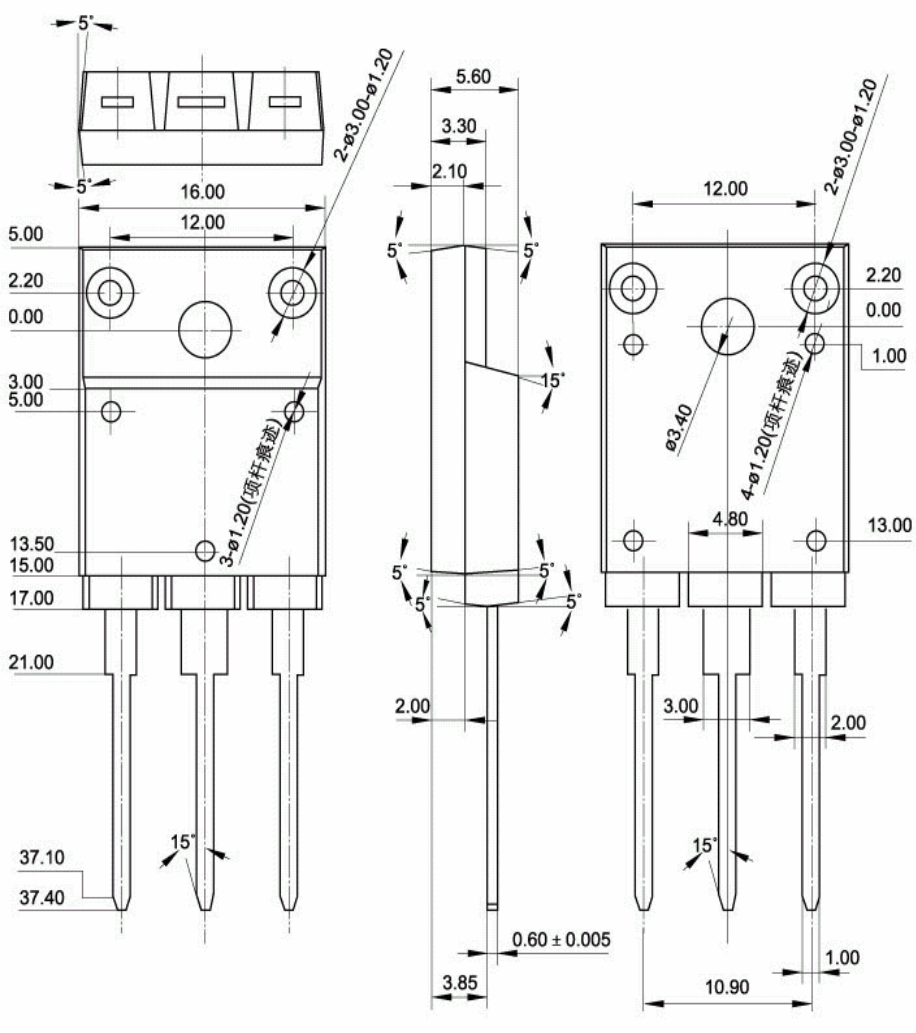


Fig.2 outline dimensions

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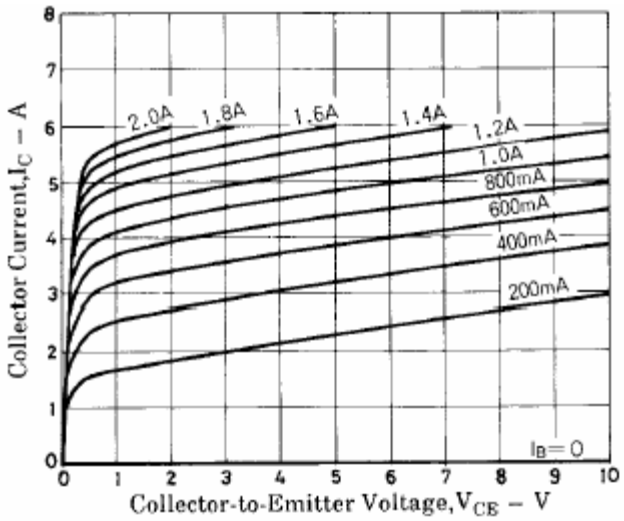


Fig.3 Static Characteristic

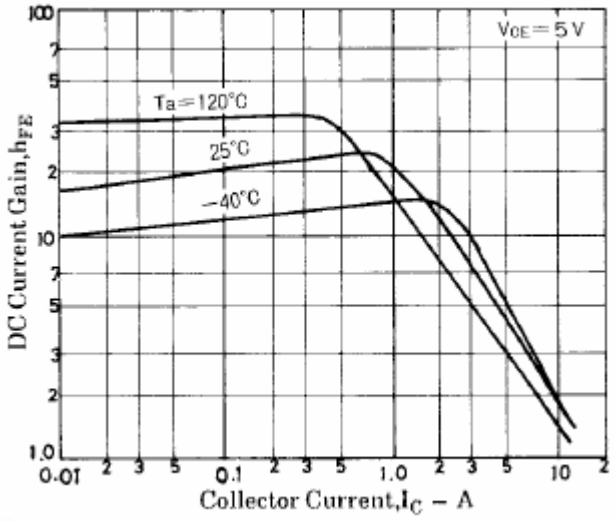


Fig.4 DC current Gain

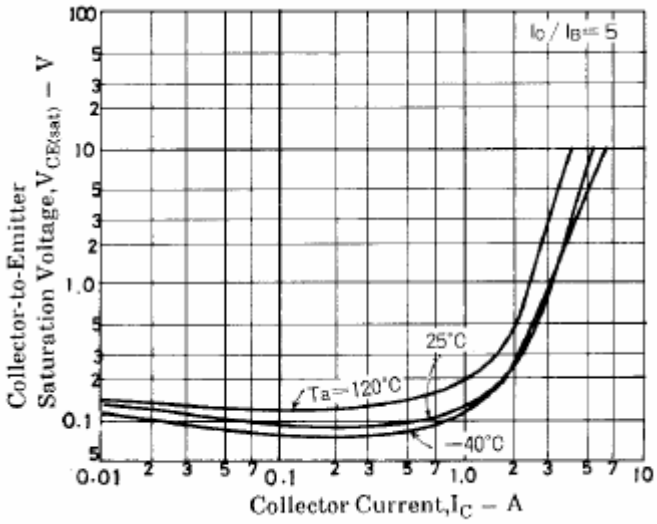


Fig.5 Collector-Emitter Saturation Voltage

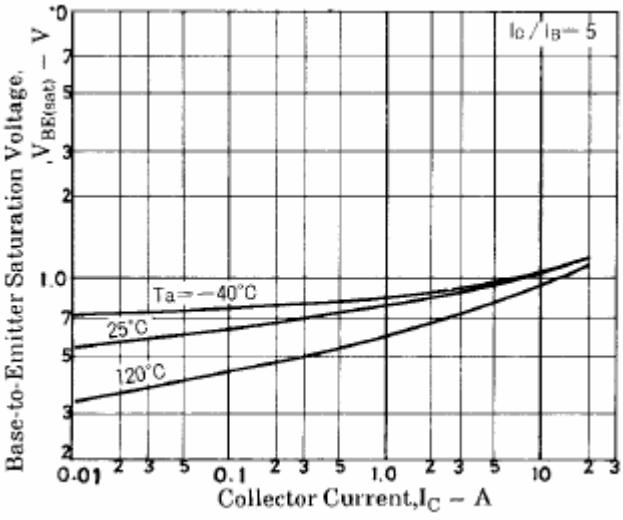


Fig.6 Base-Emitter Saturation Voltage

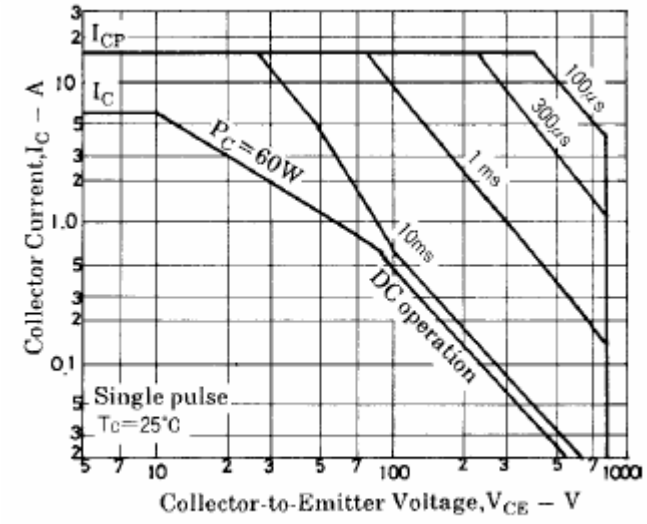


Fig.7 Safe Operating Area