Silicon NPN Power Transistors 2SC4747

DESCRIPTION

·With TO-3PFM package
·High speed switching
·High breakdown voltage

APPLICATIONS

·Character display horizontal deflection output applications

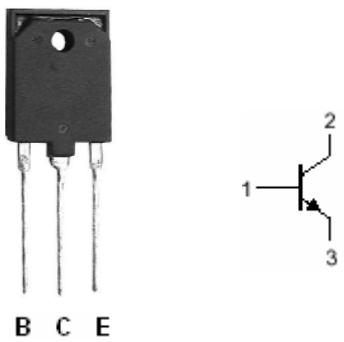

Fig.1 simplified outline (TO-3PFM) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings(Ta=□)

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		10	A
$I_{C(surge)}$	Collector current-surge		20	A
P_C	Collector power dissipation	T_C=25□	50	W
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
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA ;R_{BE}=0	800			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=10mA ;I_C=0	6			V
I_{CES}	Collector cut-off current	V_{CE}=1500V; R_{BE}=0			0.5	mA
h_{FE}	DC current gain	I_C=1A ; V_{CE}=5V	8		30	
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=8A ; I_B=1.6A			5	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=8A ; I_B=1.6A			1.5	V
t_f	Fall time	I_{CP}=7A;I_{B1}=1.4A			0.3	μs

PACKAGE OUTLINE

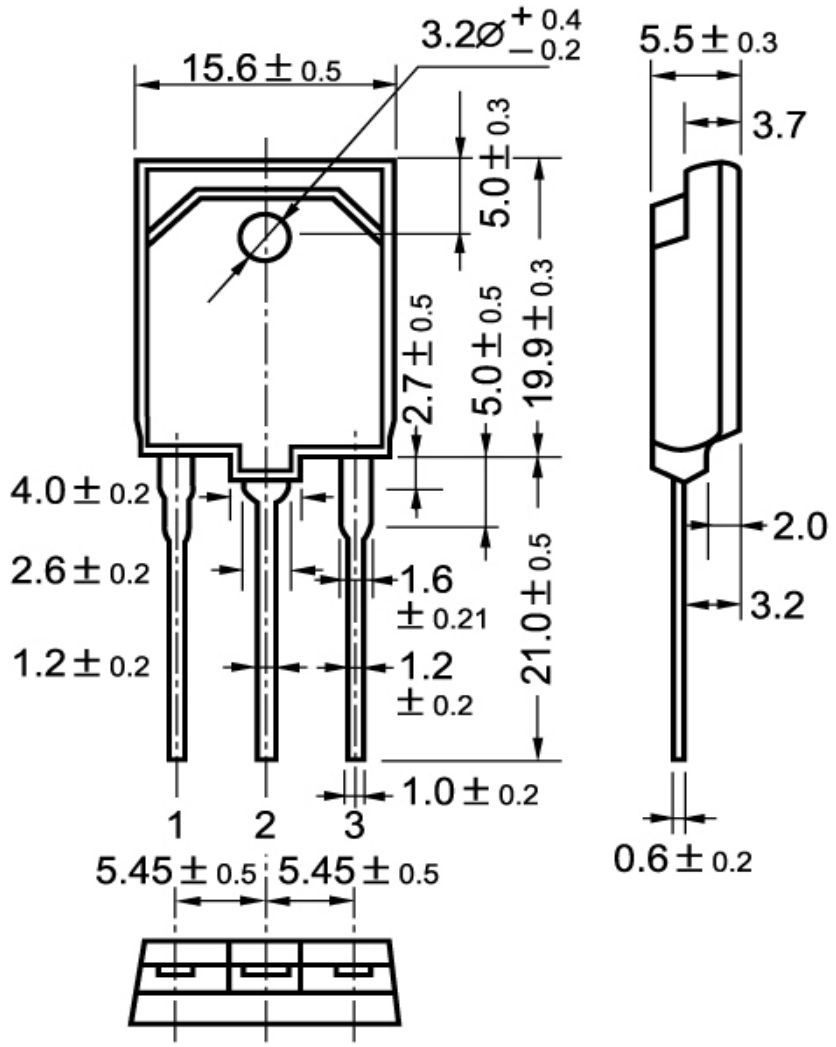

Fig.2 outline dimensions

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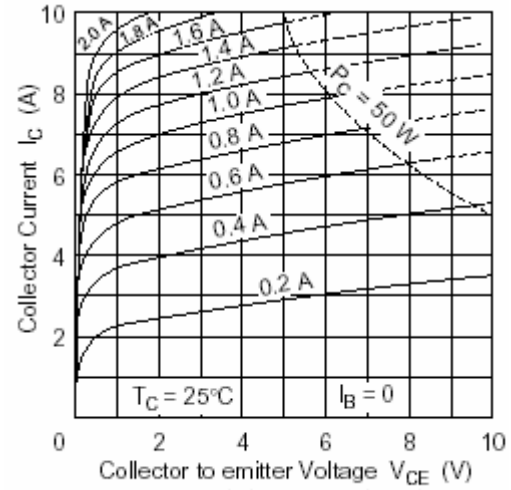

Fig.3 Static Characteristic

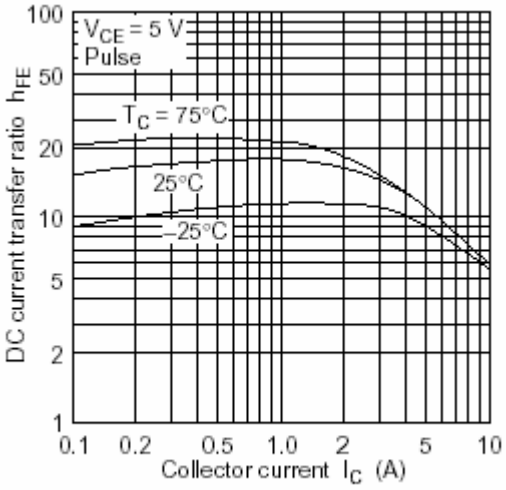

Fig.4 DC current Gain

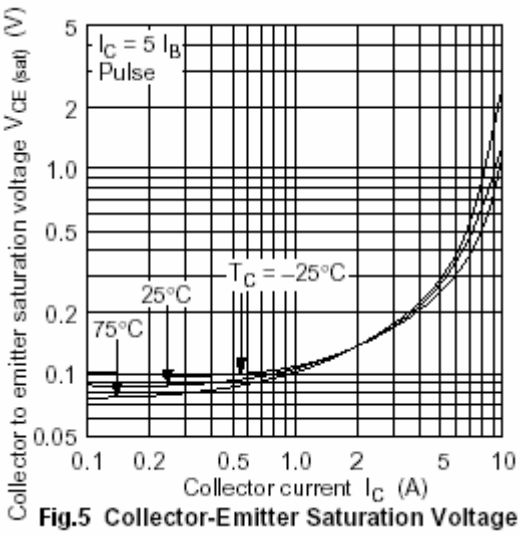

Fig.5 Collector-Emitter Saturation Voltage

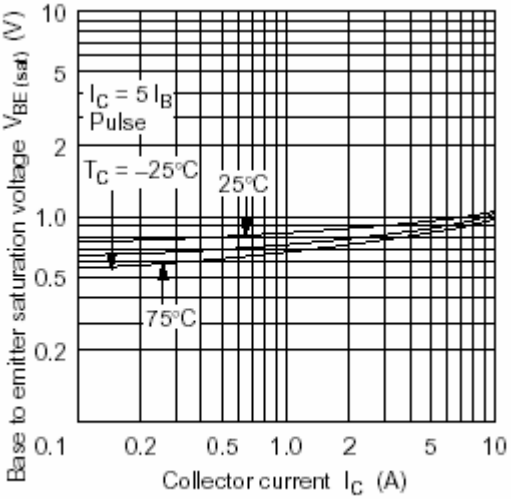

Fig.6 Base-Emitter Saturation Voltage

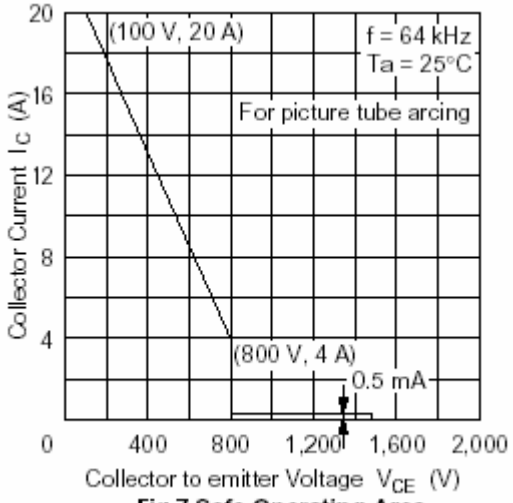

Fig.7 Safe Operating Area