Silicon NPN Power Transistors 2SC5250

DESCRIPTION

·With TO-3PFM package
·High breakdown voltage
·High speed switching
·Built-in damper diode

APPLICATIONS

·Character display horizontal deflection output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

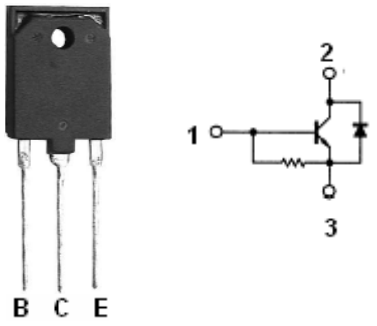


Fig.1 simplified outline (TO-3PFM) and symbol

Absolute maximum ratings(Ta=□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CEO}	Collector-emitter voltage	Open base	1500	V
V_{EBO}	Emitter-base voltage	Open collector	6	V
I_C	Collector current		8	A
I_{CP}	Collector current-peak		16	A
I_D	Diode current		8	A
P_C	Collector power dissipation	T_C=25□	50	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
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_C=400mA ;I_B=0	6			V
I_{CES}	Collector cut-off current	V_{CE}=1500V; R_{BE}=0			500	μA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=5V	6		25	
h_{FE-2}	DC current gain	I_C=5A ; V_{CE}=5V	4		7	
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=5A ; I_B=1.25A			5	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=5A ; I_B=1.25A			1.5	V
V_{ECF}	Forward voltage of damper diode	I_F=8A			2	V
t_f	Fall time	I_{CP}=5A;I_{B1}=1A; f_H=31.5kHz		0.2	0.4	μs

PACKAGE OUTLINE

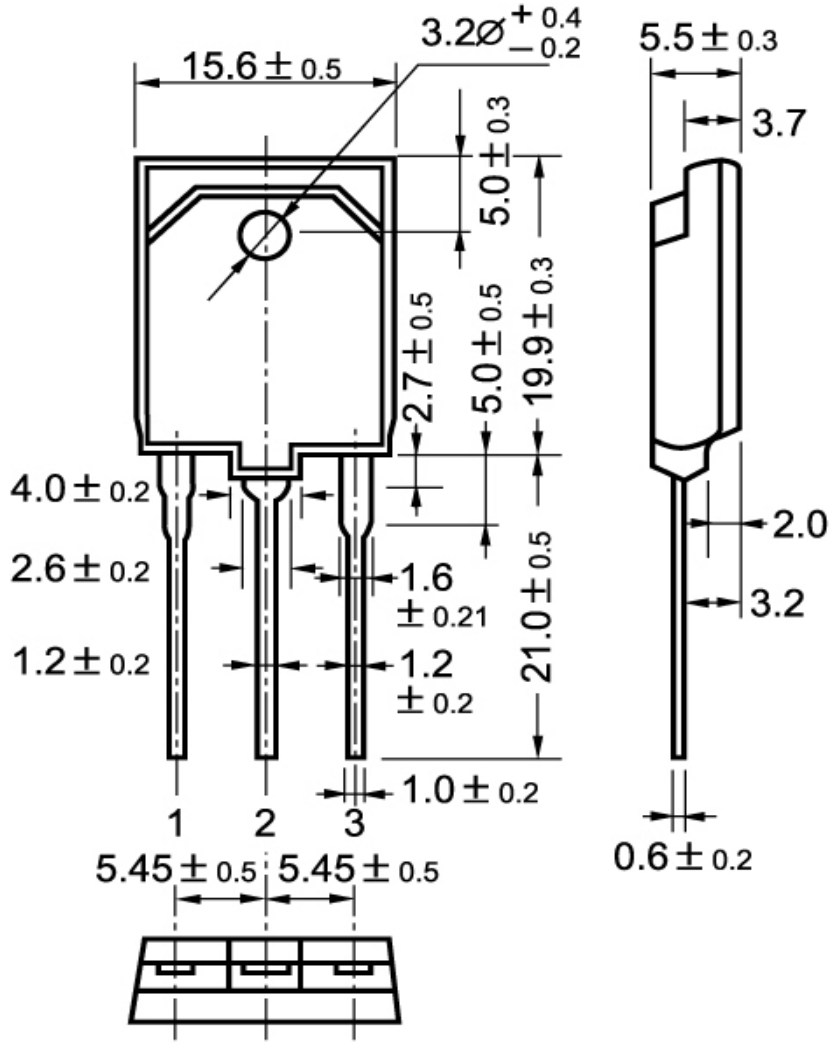


Fig.2 outline dimensions

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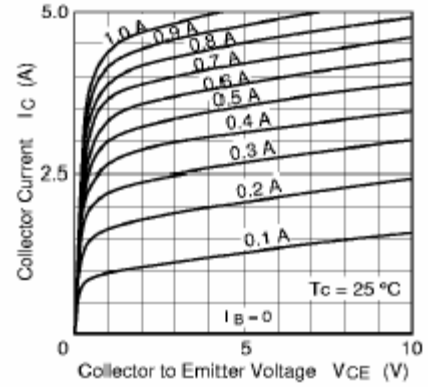


Fig.3 Static Characteristic

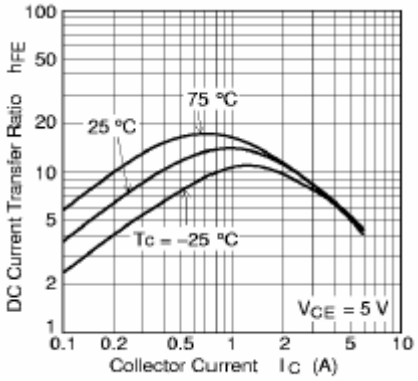


Fig.4 DC current Gain

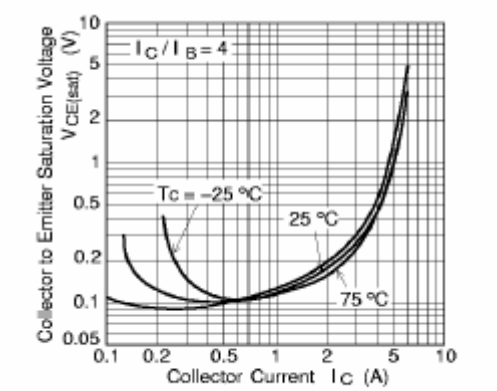


Fig.5 Collector-Emitter Saturation Voltage

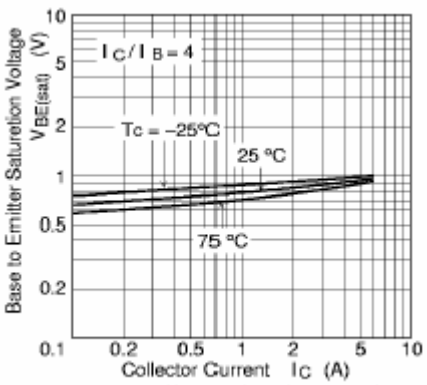


Fig.6 Base-Emitter Saturation Voltage

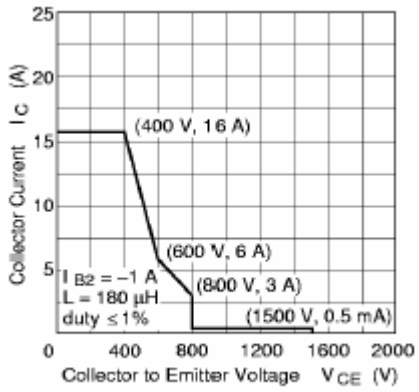


Fig.7 Safe Operating Area