Silicon PNP Power Transistors 2SB1366

DESCRIPTION

·With TO-220F package
·Complement to type 2SD2058
·Low collector saturation voltage:
$V_{CE(SAT)}$=-1.0V(Max) at I_C=-2A,I_B=-0.2A
·Collector power dissipation:
P_C=25W(T_C=25□)

APPLICATIONS

·With general purpose applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

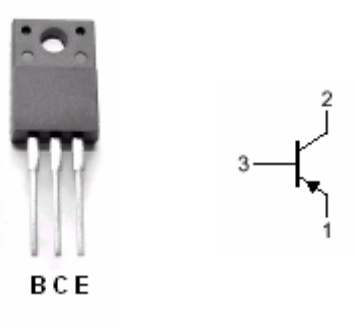

Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-60	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-3	A
I_B	Base current		-0.5	A
P_C	Collector dissipation	T_a=25□	2.0	W
		T_C=25□	25	
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=-50mA ;I_B=0	-60			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-2A ;I_B=-0.2A			-1.0	V
V_{BE}	Base-emitter on voltage	I_C=-0.5A;V_{CE}=-5V			-1.0	V
I_{CBO}	Collector cut-off current	V_{CB}=-60V; I_E=0			-0.1	mA
I_{EBO}	Emitter cut-off current	V_{EB}=-7V; I_C=0			-0.1	mA
h_{FE-1}	DC current gain	I_C=-0.5A ; V_{CE}=-5V	60		200	
h_{FE-2}	DC current gain	I_C=-3A ; V_{CE}=-5V	20			
f_T	Transition frequency	I_C=-0.5A ; V_{CE}=-5V		9.0		MHz
C_{OB}	Collector output capacitance	f=1MHz;V_{CB}=-10V		150		pF
Switching times						
t_{on}	Turn-on time	I_C=-2.0A I_{B1}=-I_{B2}=-0.2A V_{CC}=-30V ,R_L=15Ω		0.4		μs
t_s	Storage time			1.7		μs
t_f	Fall time			0.5		μs

◆ h_{FE-1} Classifications

O	Y
60-120	100-200

PACKAGE OUTLINE

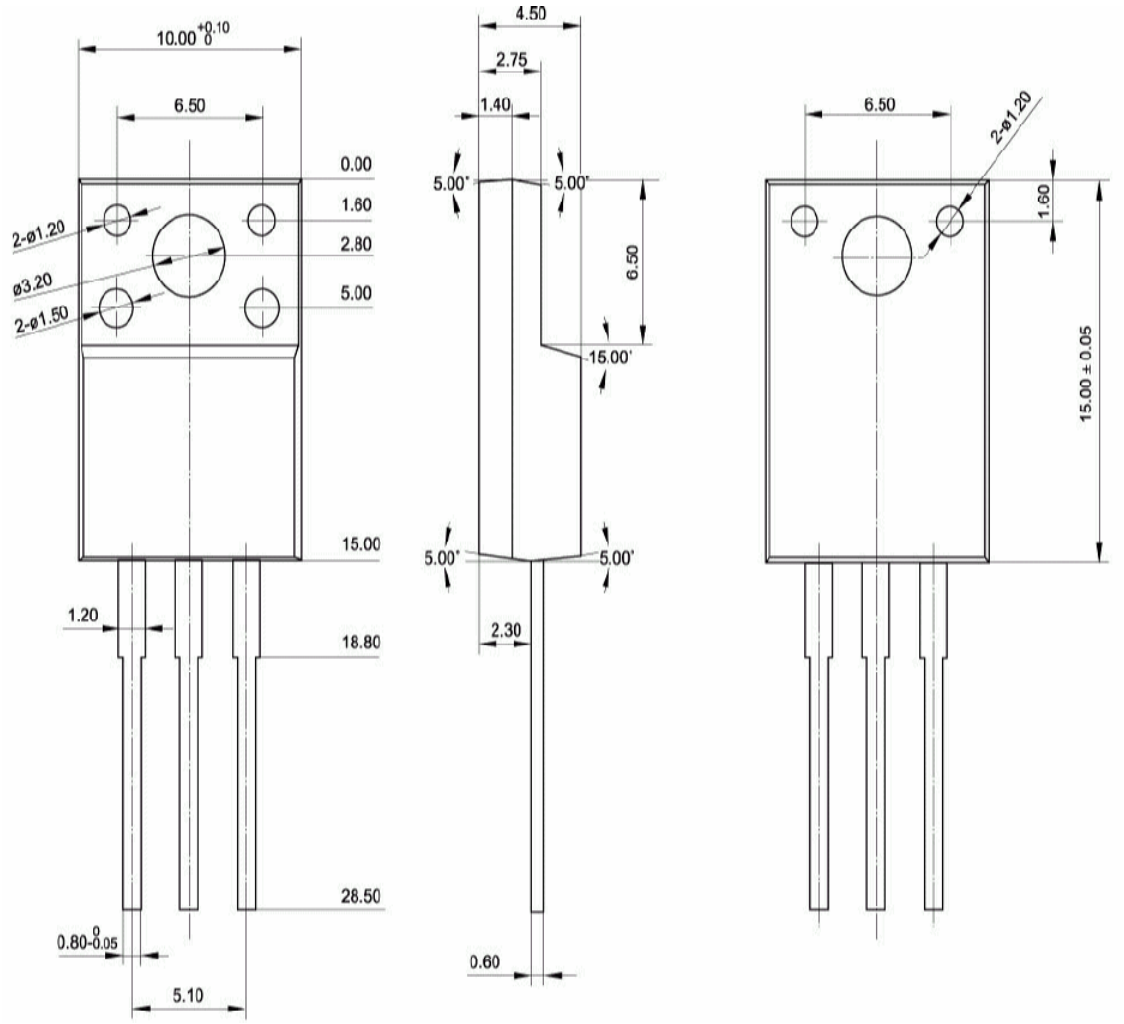

Fig.2 Outline dimensions

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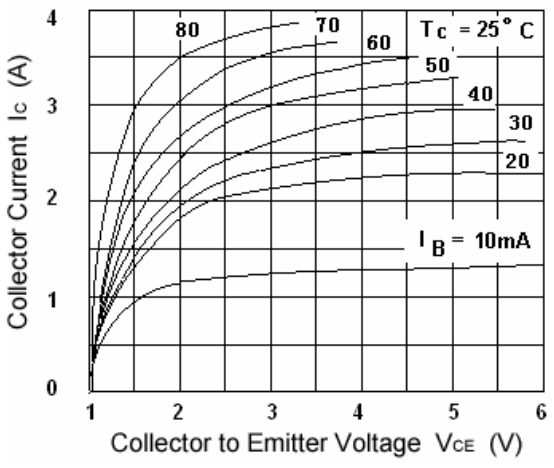

Fig.3 Static Characteristic

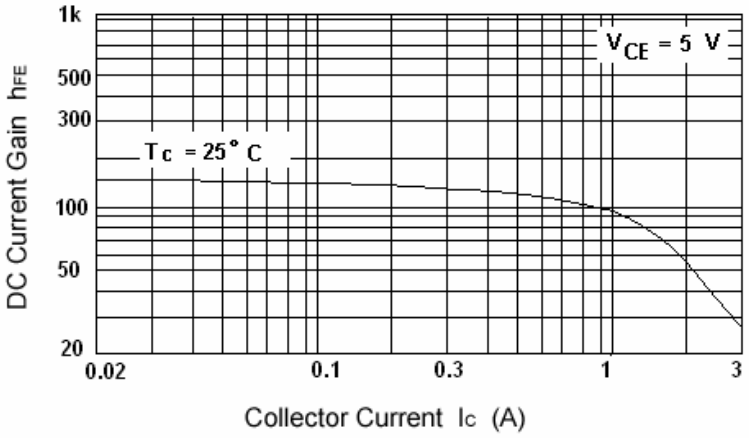

Fig.4 DC current Gain

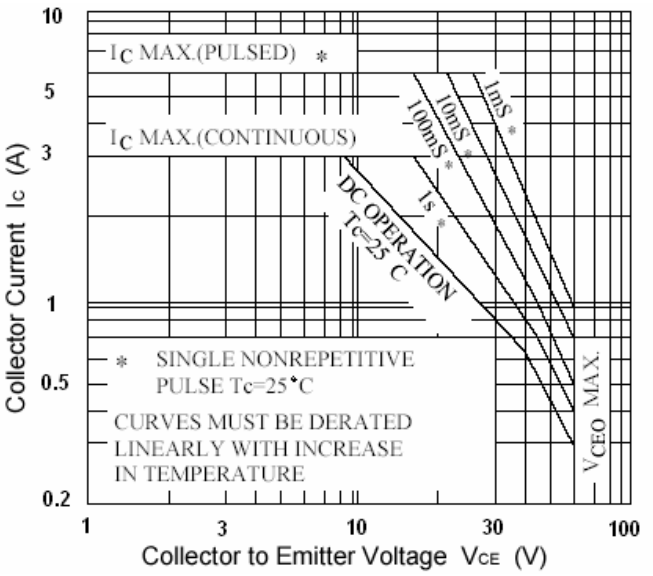

Fig.5 Safe Operating Area

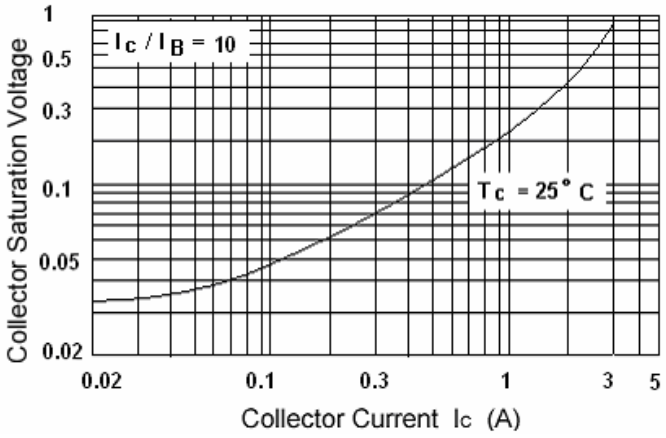

Fig.6 Collector-Emitter Saturation Voltage