Silicon PNP Power Transistors 2SA473

DESCRIPTION

·With TO-220 package
·Complement to type 2SC1173
·Collector current :I_C=-3A
·Collector dissipation:P_C=10W@T_C=25□

APPLICATIONS

·Low frequency power amplifier
·Power regulator

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base

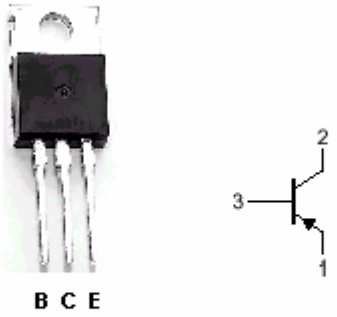

Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings (Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-30	V
V_{CEO}	Collector-emitter voltage	Open base	-30	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current (DC)		-3	A
P_C	Collector power dissipation	T_C=25□	10	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 ;I_B=0	-30			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=-0.5mA ;I_E=0	-30			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=-1mA ;I_C=0	-5			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=-2A; I_B=-0.2A			-0.8	V
V_{BE}	Base-emitter voltage	I_C=-0.5A ; V_{CE}=-2V			-1.0	V
I_{CBO}	Collector cut-off current	V_{CB}=-20V;I_E=0			-1.0	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-5V; I_C=0			-1.0	μA
h_{FE-1}	DC current gain	I_C=-0.5A ; V_{CE}=-2V	70		240	
h_{FE-2}	DC current gain	I_C=-2.5A ; V_{CE}=-2V	25			
C_{OB}	Output capacitance	I_E=0; V_{CB}=-10V;f=1MHz		40		pF
f_T	Transition frequency	I_C=-0.5A ; V_{CE}=-2V		100		MHz

◆ **h_{FE-1} classifications**

O	Y
70-140	120-240

PACKAGE OUTLINE

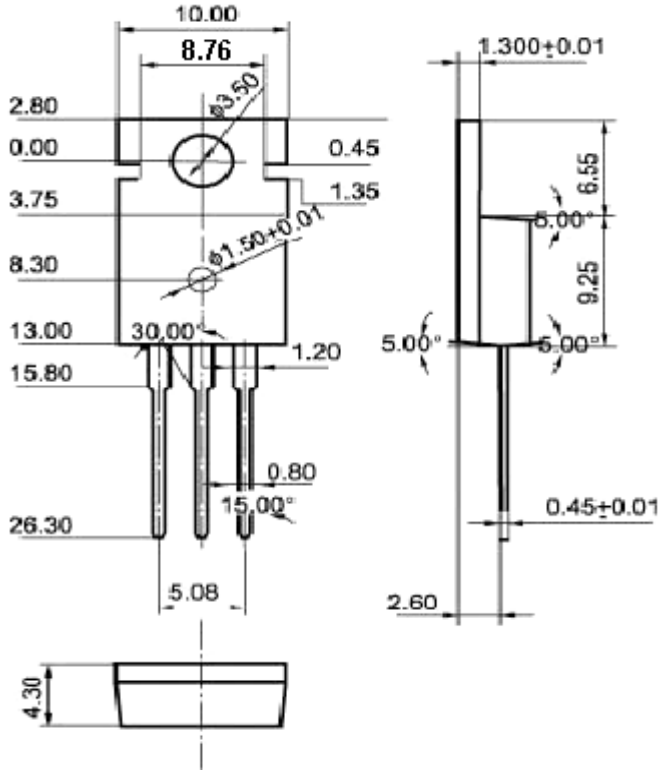

Fig.2 outline dimensions (unindicated tolerance:±0.10 mm)

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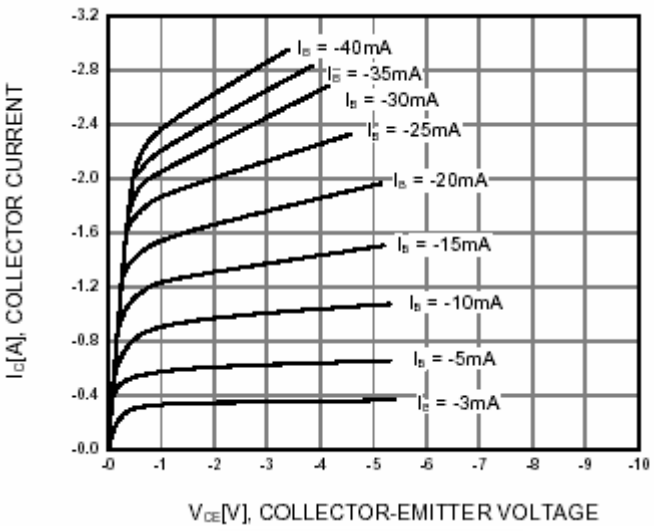

Fig.3 Static Characteristic

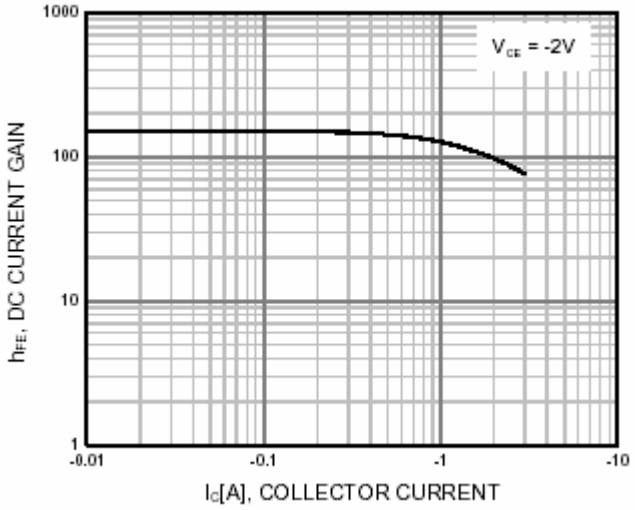

Fig.4 DC current Gain

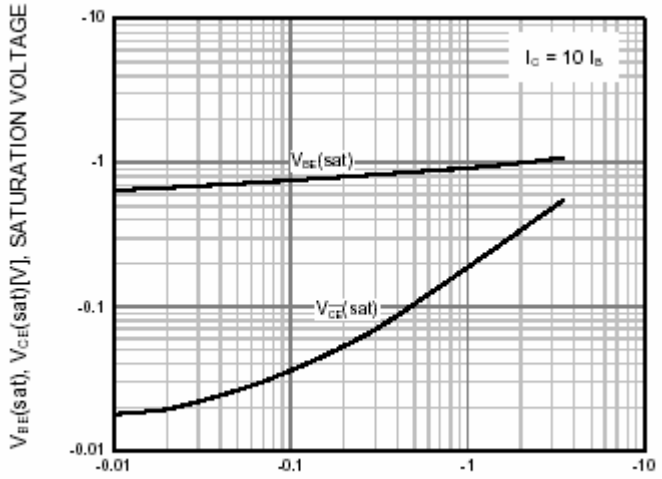

Fig.5 Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

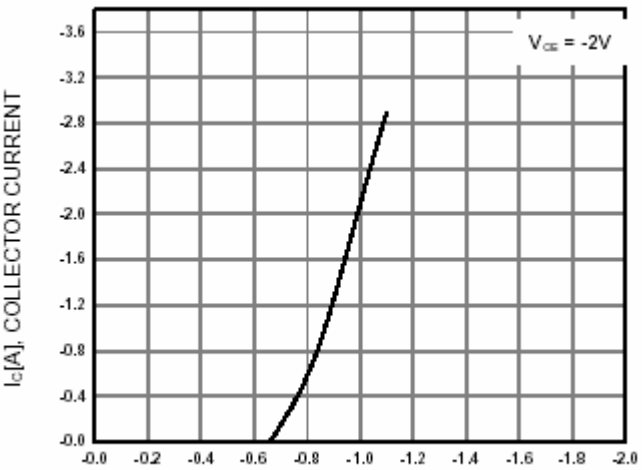

Fig.6 Base-Emitter On Voltage

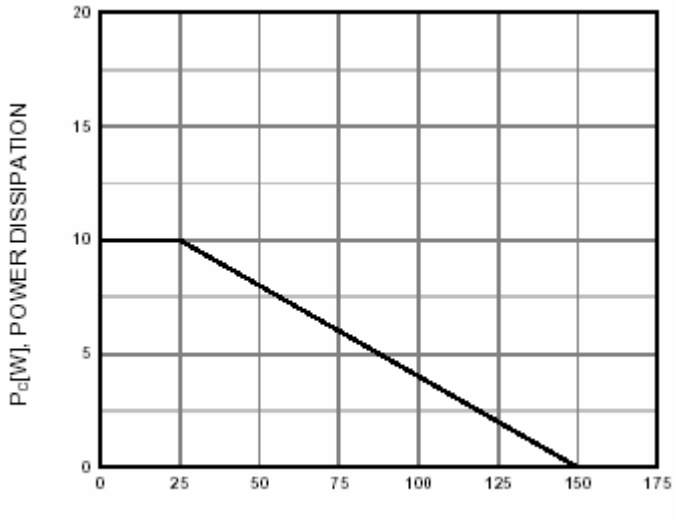

Fig.7 Power Derating

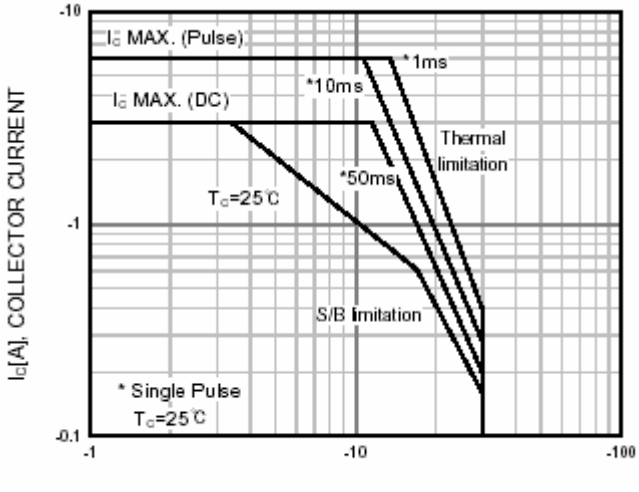

Fig.8 Safe Operating Area