

**Silicon PNP Power Transistors****2SA1043****DESCRIPTION**

- With TO-3 package
- High transition frequency
- Excellent safe operating area

APPLICATIONS

- Power switching applications
- High frequency power amplifier
- Switching regulators
- DC-DC converters

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

**Fig.1 simplified outline (TO-3) and symbol****Absolute maximum ratings(Ta=℃)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-120	V
V _{CEO}	Collector-emitter voltage	Open base	-120	V
V _{EBO}	Emitter-base voltage	Open collector	-7	V
I _C	Collector current		-30	A
P _C	Collector power dissipation	T _C =25℃	150	W
T _j	Junction temperature		175	℃
T _{stg}	Storage temperature		-55~200	℃

**Silicon PNP Power Transistors****2SA1043****CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-10mA ; I _B =0	-120			V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-0.1mA ; I _E =0	-120			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-0.1mA ; I _C =0	-7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-15A ; I _B =-1.5A			-1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-15A ; I _B =-1.5A			-2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-120V ; I _E =0			-50	μ A
I _{EBO}	Emitter cut-off current	V _{EB} =-7V ; I _C =0			-50	μ A
h _{FE}	DC current gain	I _C =-3A ; V _{CE} =-5V	35		200	
C _{OB}	Output capacitance	I _E =0 ; V _{CB} =-10V ; f=1.0MHz		600		pF
f _T	Transition frequency	I _C =-2A ; V _{CE} =-10V		60		MHz



PACKAGE OUTLINE

