



PZT5401

PNP EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE SWITCHING TRANSISTOR

■ FEATURES

*High Collector-Emitter Voltage:

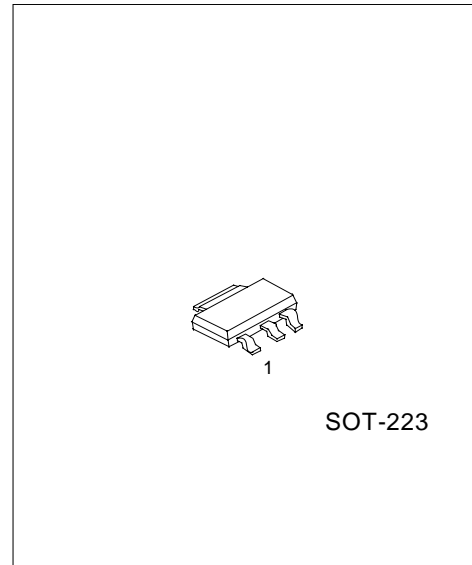
$V_{CE0} = -150V$

*High current gain

APPLICATIONS

*Telephone Switching Circuit

*Amplifier



*Pb-free plating product number: PZT5401L

■ PIN CONFIGURATION

PIN NO.	PIN NAME
1	Base
2	Collector
3	Emitter

■ ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead Free Plating		
PZT5401-AA3-R	PZT5401L-AA3-R	SOT-223	Tape & Reel

■ ABSOLUTE MAXIMUM RATINGS (Ta = 25 , unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CB0}	-160	V
Collector-Emitter Voltage	V _{CEO}	-150	V
Emitter-Base Voltage	V _{EBO}	-5	V
DC Collector Current	I _C	-600	mA
Power Dissipation	P _D	2	W
Operating Junction Temperature	T _J	+150	
Storage Temperature	T _{STG}	-40 ~ +150	

■ ELECTRICAL CHARACTERISTICS (Ta= 25 , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	V _{CB0}	I _C =100μA, I _E =0	-160			V
Collector-Emitter Breakdown Voltage	V _{CEO}	I _C =1mA, I _B =0	-150			V
Emitter-Base Breakdown Voltage	V _{EBO}	I _E =10μA, I _C =0	-6			V
Collector Cut-off Current	I _{CBO}	V _{CB} =120V, I _E =0			-50	nA
Emitter Cut-off Current	I _{EBO}	V _{BE} =-3V, I _C =0			-50	nA
DC Current Gain(note)	h _{FE}	V _{CE} =-5V, I _C =-1mA	80		400	
		V _{CE} =-5V, I _C =-10mA	80			
		V _{CE} =-5V, I _C =-50mA	80			
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =-10mA, I _B =-1mA I _C =-50mA, I _B =-5mA			-0.2 -0.5	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =-10mA, I _B =-1mA I _C =-50mA, I _B =-5mA			-1 -1	V
Current Gain Bandwidth Product	f _T	V _{CE} =-10V, I _C =-10mA, f=100MHz	100		400	MHz
Output Capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			6.0	pF
Noise Figure	N _F	I _C =-0.25mA, V _{CE} =-5V R _S =1kΩ, f=10Hz ~ 15.7kHz			8	dB

Note: Pulse test: PW<300μs, Duty Cycle<2%

■ CLASSIFICATION OF hFE

RANK	A	B	C
RANGE	80-170	150-240	200-400

■ TYPICAL CHARACTERISTICS

Fig.1 Collector output Capacitance

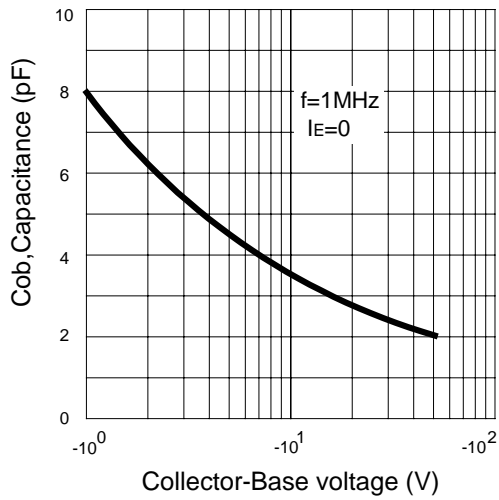


Fig.2 DC current Gain

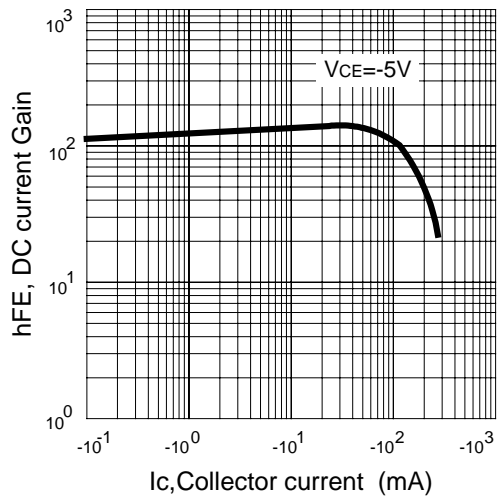


Fig.3 Base-Emitter on Voltage

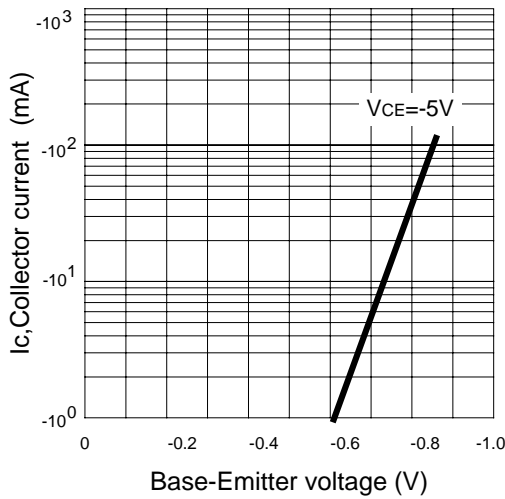


Fig.4 Saturation voltage

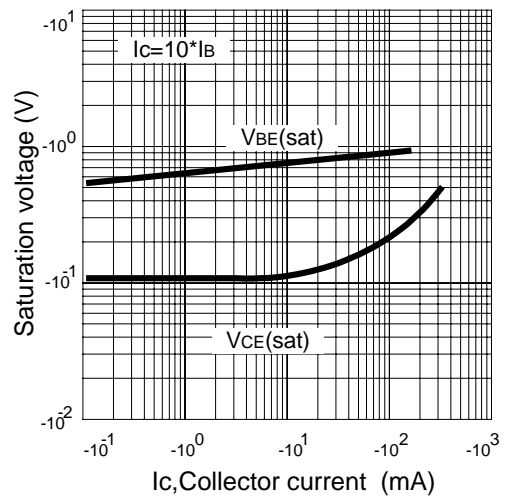
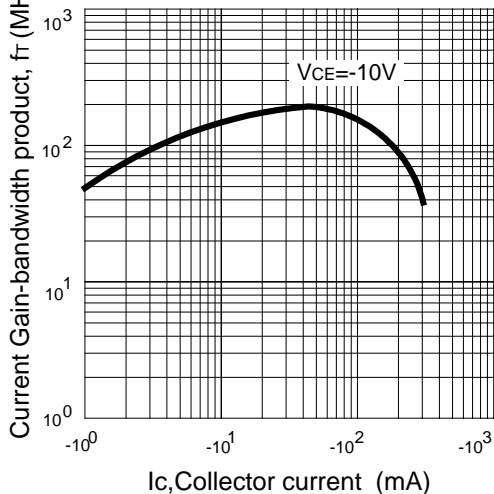


Fig.5 Current gain-bandwidth product



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