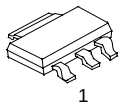
PZT5401

PNP EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE SWITCHING TRANSISTOR



SOT-223

*Pb-free plating product number:PZT5401L

■ FEATURES

*High Collector-Emitter Voltage:
V_{CEO}=-150V
*High current gain

APPLICATIONS
*Telephone Switching Circuit
*Amplifier

■ 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

■ ABSOLUATE MAXIUM RATINGS (Ta = 25℃, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-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_{CBO}	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, Ic=0			-50	nA
DC Current Gain(note)	h_{FE}	V_{CE}=-5V, Ic=-1mA V_{CE}=-5V, Ic=-10mA V_{CE}=-5V, Ic=-50mA	80 80 80		400	
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, Ic=-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 CHARACTERICS

Fig.1 Collector output Capacitance

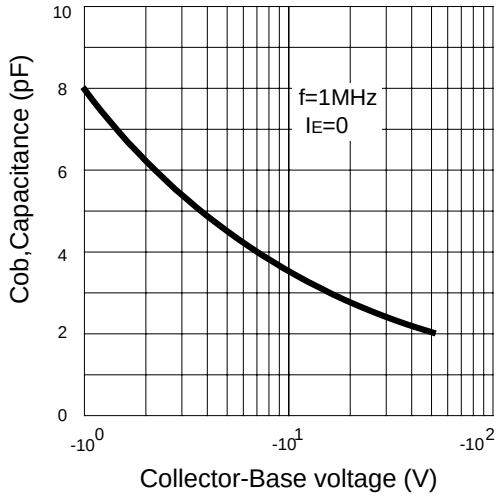


Fig.2 DC current Gain

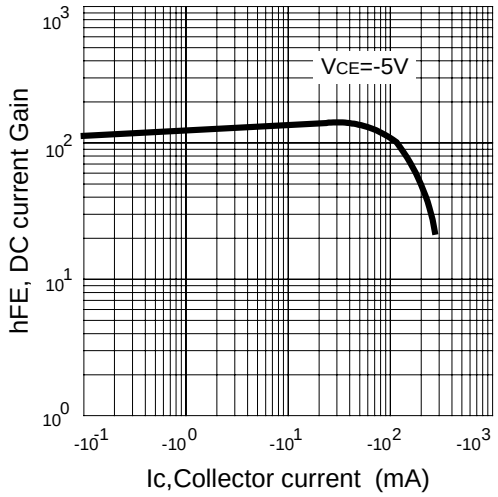


Fig.3 Base-Emitter on Voltage

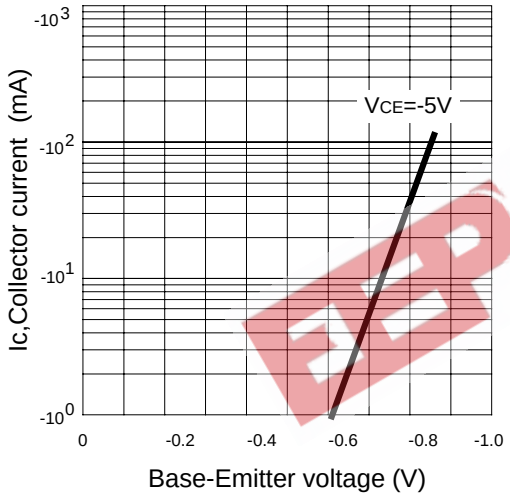


Fig.4 Saturation voltage

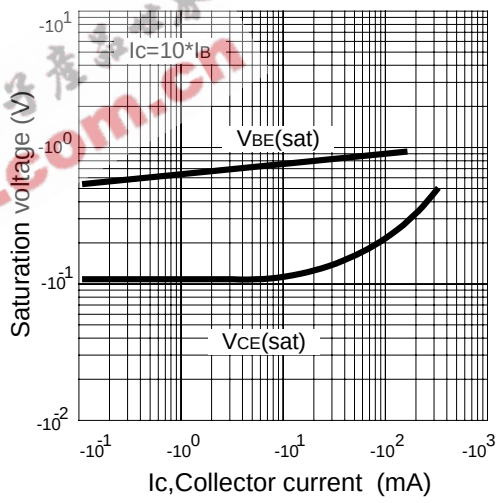


Fig.5 Current gain-bandwidth product