



PZT5551

NPN SILICON TRANSISTOR

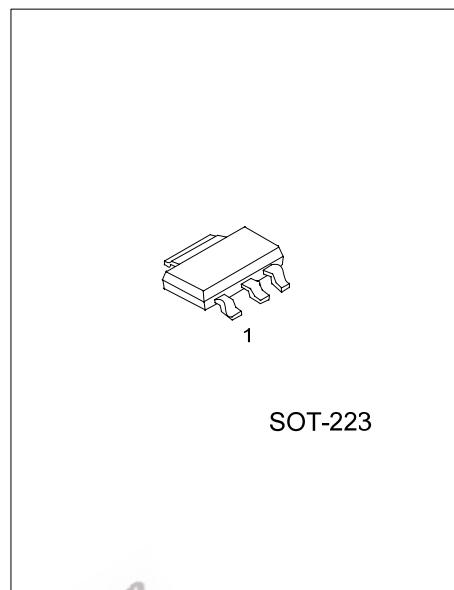
HIGH VOLTAGE SWITCHING TRANSISTOR

■ FEATURES

* High Collector-Emitter Voltage:

$V_{CEO}=160V$

*High current gain



*Pb-free plating product number:PZT5551L

■ ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
PZT5551-x-AA3-F-R	PZT5551L-x-AA3-F-R	SOT-223	B	C	E	Tape Reel

PZT5551L-x-AA3-F-R	(1)Packing Type	(1) R: Tape Reel
	(2)Pin Assignment	(2) refer to Pin Assignment
	(3)Package Type	(3) AA3: SOT-223
	(4)Rank	(4) x: refer to Classification of h_{FE}
	(5)Lead Plating	(5) L: Lead Free Plating, Blank: Pb/Sn

■ ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CBO}	180	V
Collector-Emitter Voltage	V _{CEO}	160	V
Emitter-Base Voltage	V _{EBO}	6	V
DC Collector Current	I _C	600	mA
Power Dissipation	P _C	2	W
Operating Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-65 ~ +150	°C

Note Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Thermal Resistance	θ _{JA}	62.5	°C/W

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

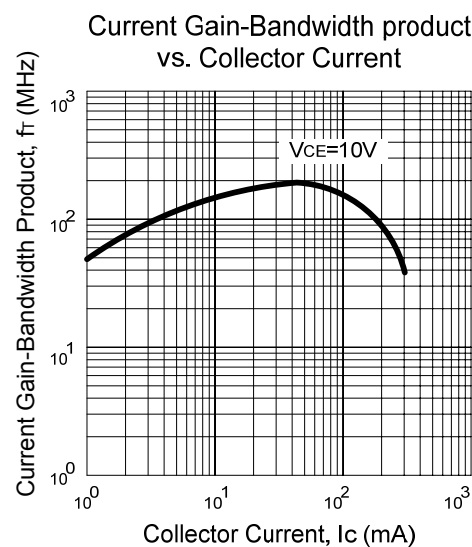
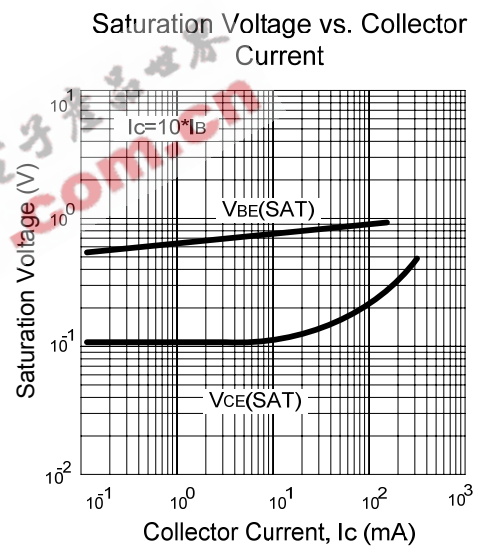
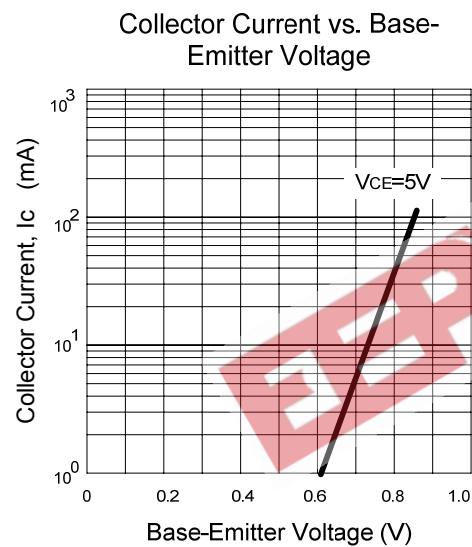
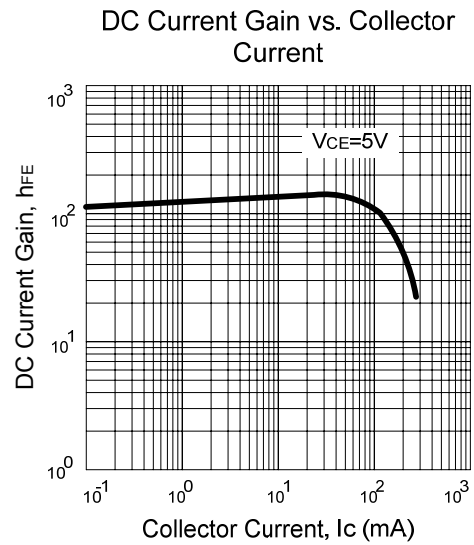
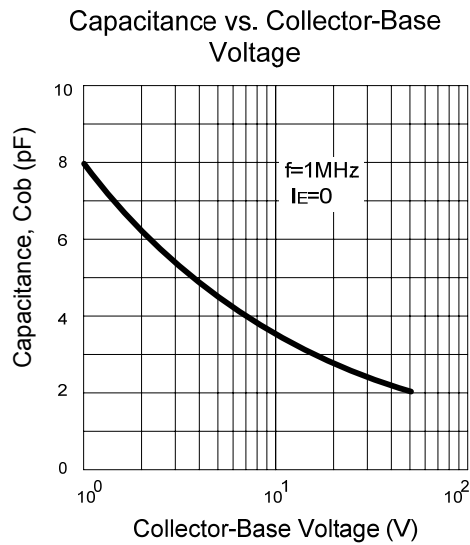
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =100μA, I _E =0	180			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =1mA, I _B =0	160			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =10μA, I _C =0	6			V
Collector Cut-off Current	I _{CBO}	V _{CB} =120V, I _E =0			50	nA
Emitter Cut-off Current	I _{EBO}	V _{BE} =4V, I _C =0			50	nA
DC Current Gain(note)	h _{FE}	V _{CE} =5V, I _C =1mA	80	160	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			0.15	V
		I _C =50mA, I _B =5mA			0.2	
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C =10mA, I _B =1mA			1	V
		I _C =50mA, I _B =5mA			1	
Current Gain Bandwidth Product	f _T	V _{CE} =10V, I _C =10mA, f=100MHz	100		300	MHz
Output Capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			6.0	pF
Noise Figure	NF	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 h_{FE}

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

TYPICAL CHARACTERISTICS



EEPW 電子產品世界
.com.cn

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.