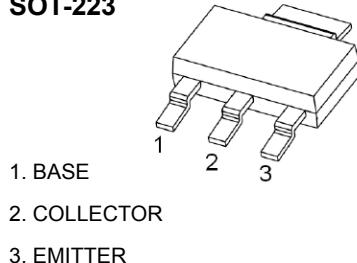




## SOT-223 Plastic-Encapsulate Transistors

PZTA42 TRANSISTOR (NPN)

SOT-223



### FEATURES

- High breakdown voltage
- Low collector-emitter saturation voltage
- Complementary type: PZTA92(PNP)

### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Para	meter	Value	Unit
$V_{CBO}$	Collector-Base Voltage		300	V
$V_{CEO}$	Collector-Emitter Voltage		300	V
$V_{EBO}$	Emitter-Base Voltage		6	V
$I_c$	Collector Current -Continuous		0.2	A
$I_{CM}$	Collector Current -Pulsed		0.5	A
$P_c$	Collector Power Dissipation		1	W
$T_j$	Junction Temperature		150	°C
$T_{stg}$	Storage Temperature		-55~150	°C

### MARKING:

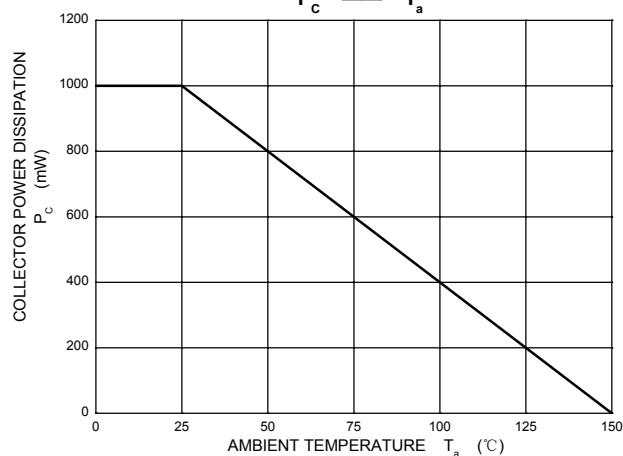
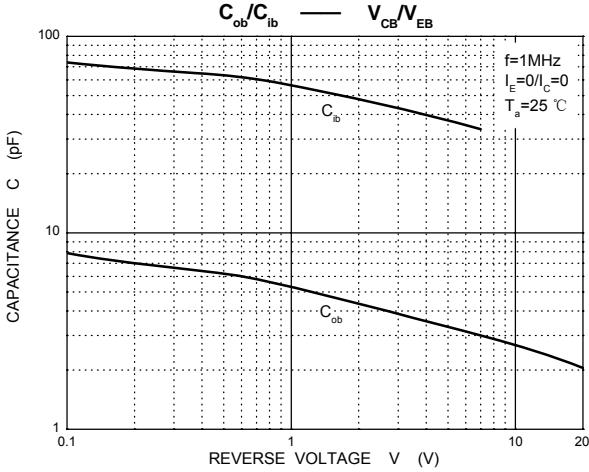
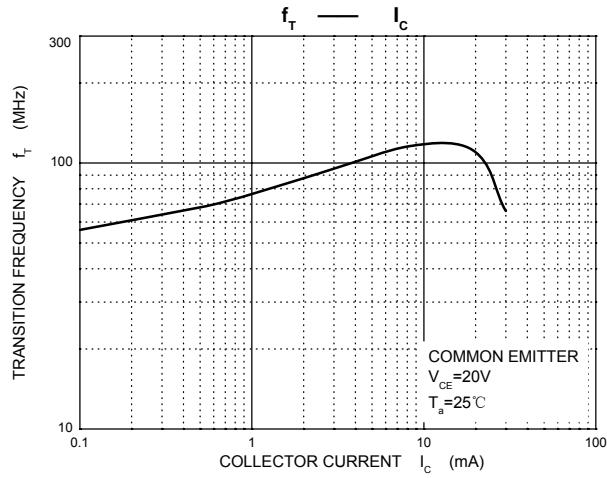
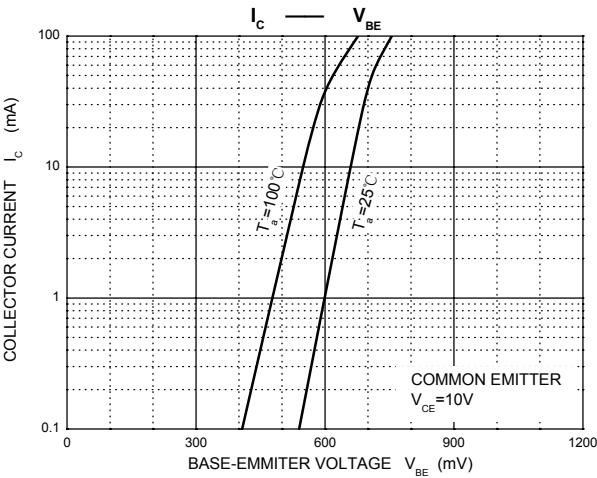
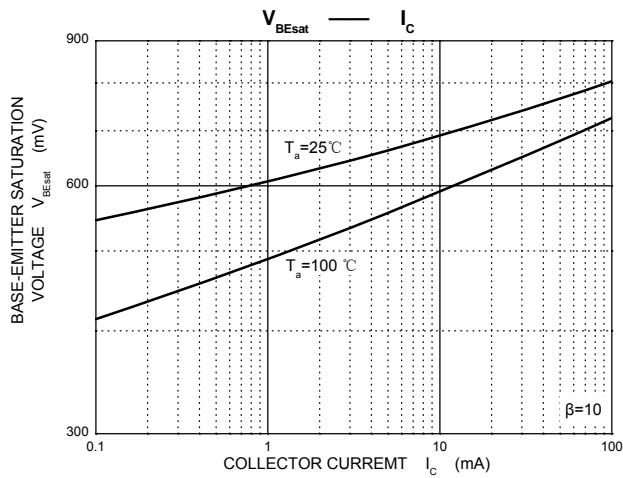
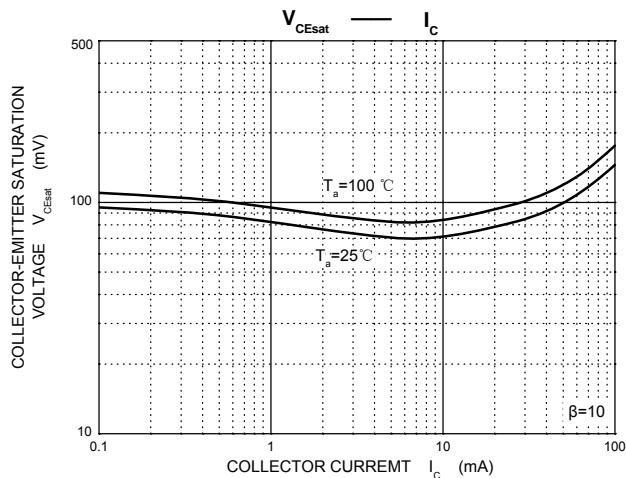
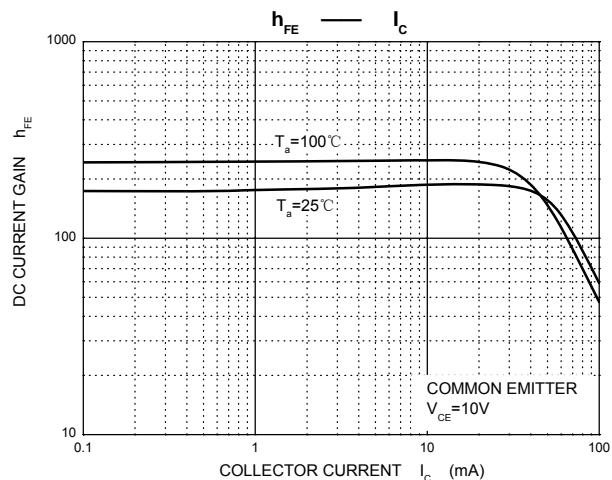
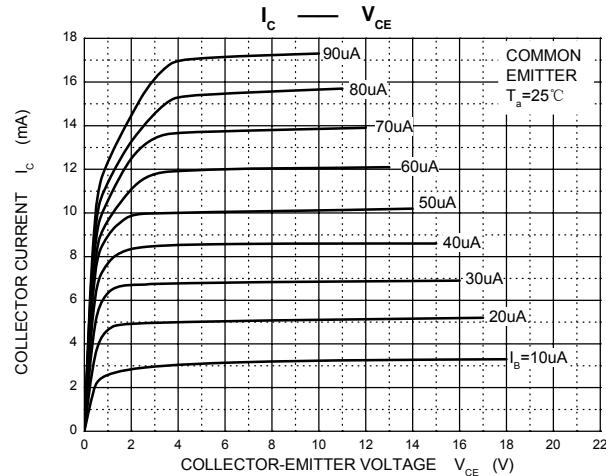


Solid dot = Green molding compound device,  
if none, the normal device.

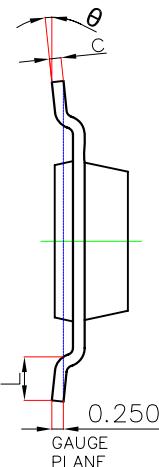
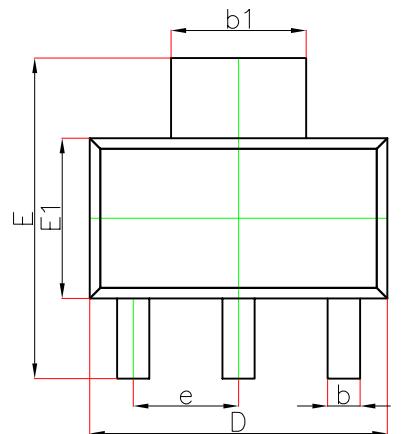
### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	300			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	300			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=200\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=10\text{V}, I_C=1\text{mA}$	25			
	$h_{FE(2)}$	$V_{CE}=10\text{V}, I_C=10\text{mA}$	40			
	$h_{FE(3)}$	$V_{CE}=10\text{V}, I_C=30\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C=20\text{mA}, I_B=2\text{mA}$			0.5	V
Base-emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C=20\text{mA}, I_B=2\text{mA}$			0.9	V
Transition frequency	$f_T$	$V_{CE}=20\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	50			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=20\text{V}, I_E=0, f=1\text{MHz}$			3	pF

## Typical Characteristics

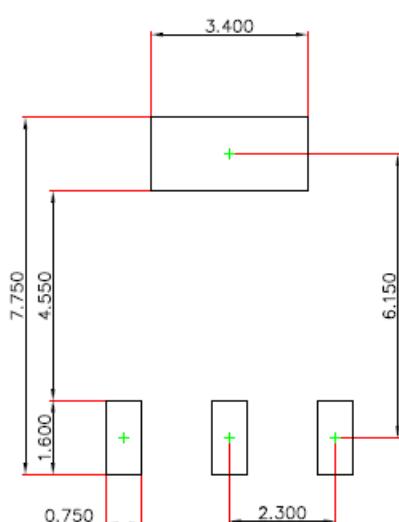


## SOT-223 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	—	1.800	—	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	6.700	7.300	0.264	0.287
E1	3.300	3.700	0.130	0.146
e	2.300(BSC)		0.091(BSC)	
L	0.750	—	0.030	—
θ	0°	10°	0°	10°

## SOT-223 Suggested Pad Layout



### Note:

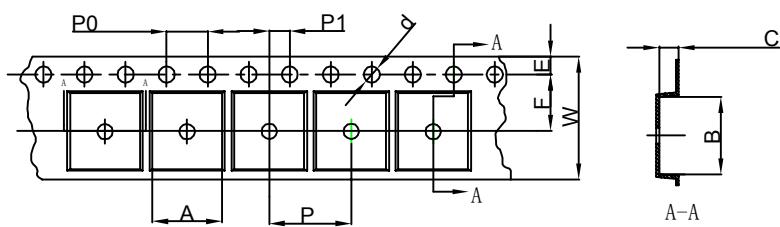
1. Controlling dimension:in millimeters.
2. General tolerance: $\pm 0.050\text{mm}$ .
3. The pad layout is for reference purposes only.

### NOTICE

JCET reserve the right to make modifications,enhancements, improvements, corrections or other changes without further notice to any product herein.JCET does not assume any liability arising out of the application or use of any product described herein.

## SOT-223 Tape and Reel

### SOT-223 Embossed Carrier Tape

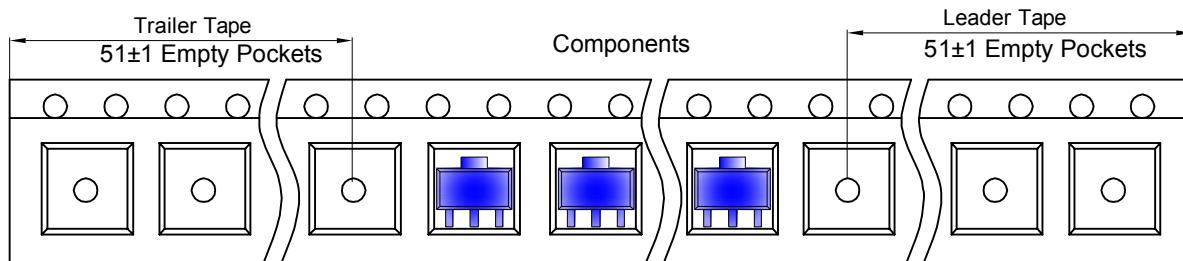


#### Packaging Description:

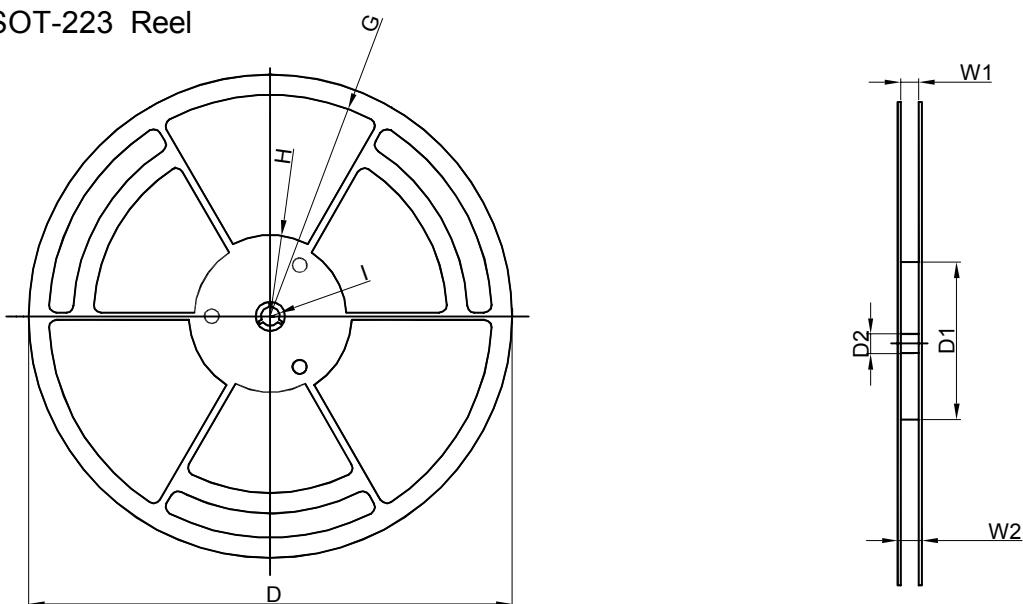
SOT-223 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 2,500 units per 13" or 33.0cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-223	6.765	7.335	1.88	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00

### SOT-223 Tape Leader and Trailer



### SOT-223 Reel



Dimensions are in millimeter							
Reel Option	D	D1	D2	G	H	I	W1
13" Dia	Ø330.00	100.00	13.00	R151.00	R56.00	R6.50	12.40

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
2,500 pcs	13 inch	2,500 pcs	336×336×48	20,000 pcs	445×355×365	

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for Bipolar Transistors - BJT category:***

***Click to view products by Changjiang manufacturer:***

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T\)](#)  
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)  
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-TL-H](#)  
[2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)  
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)  
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)