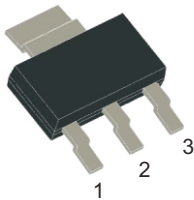


PZTA44-G (NPN)
RoHS Device



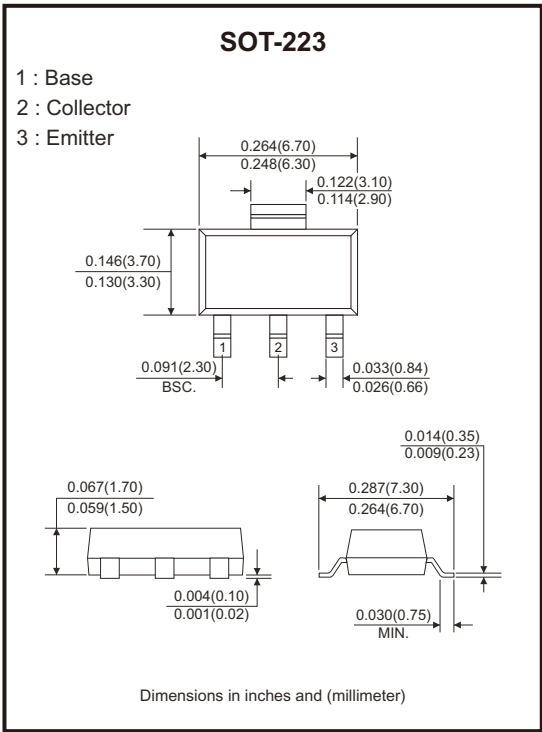
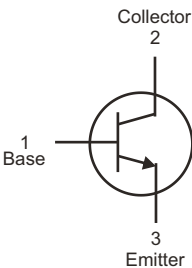
Features

- High collector-emitter voltage.
- Low current.

Mechanical data

- Case : SOT-223, Molded plastic
- Terminals: Solderable per MIL-STD-750, method 2026.

Circuit Diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

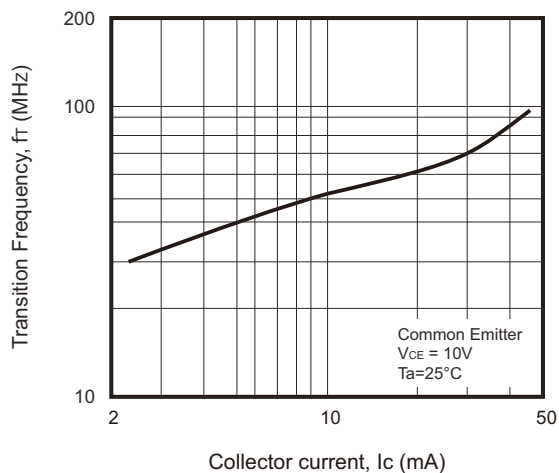
Parameter	Symbol	Value	Unit
Collector-base voltage	V_{CBO}	400	V
Collector-emitter voltage	V_{CEO}	400	V
Emitter-base voltage	V_{EBO}	6	V
Collector current-continuous	I_C	200	mA
Collector current-pulsed	I_{CM}	300	mA
Collector power dissipation	P_C	1	W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-65 to +150	°C

Electrical Characteristics (Ta=25°C, unless otherwise specified)

Parameter	Conditions	Symbol	Min.	Max.	Unit
Collector-base breakdown voltage	$I_C=100\mu A, I_E=0$	$V_{(BR)CBO}$	400		V
Collector-emitter breakdown voltage	$I_C=1mA, I_B=0$	$V_{(BR)CEO}$	400		V
Emitter-base breakdown voltage	$I_E=100\mu A, I_C=0$	$V_{(BR)EBO}$	6		V
Collector cut-off current	$V_{CB}=400V, I_E=0$	I_{CBO}		0.1	μA
Emitter cut-off current	$V_{EB}=4V, I_C=0$	I_{EBO}		0.1	μA
DC current gain	$V_{CE}=10V, I_C=1mA$	$h_{FE(1)}$	40		
	$V_{CE}=10V, I_C=10mA$	$h_{FE(2)}$	50	200	
	$V_{CE}=10V, I_C=50mA$	$h_{FE(3)}$	45		
	$V_{CE}=10V, I_C=100mA$	$h_{FE(4)}$	40		
Collector-emitter saturation voltage	$I_C=1mA, I_B=0.1mA$	$V_{CE(sat)}$		0.4	V
	$I_C=10mA, I_B=1mA$	$V_{CE(sat)}$		0.5	V
	$I_C=50mA, I_B=5mA$	$V_{CE(sat)}$		0.75	V
Base-emitter saturation voltage	$I_C=10mA, I_B=1mA$	$V_{BE(sat)}$		0.75	V
Transition frequency	$V_{CE}=10V, I_C=10mA, f=100MHz$	f_T	20		MHz
Collector capacitance	$V_{CB}=20V, I_E=0, f=1MHz$	C_C		7	pF
Emitter capacitance	$V_{EB}=0.5V, I_C=0, f=1MHz$	C_e		130	pF

Rating and Characteristic Curves (PZTA44-G)

Fig.1 - f_T — I_C



Company reserves the right to improve product design , functions and reliability without notice.

Rating and Characteristic Curves (PZTA44-G)

Fig.2 - Static Characteristic

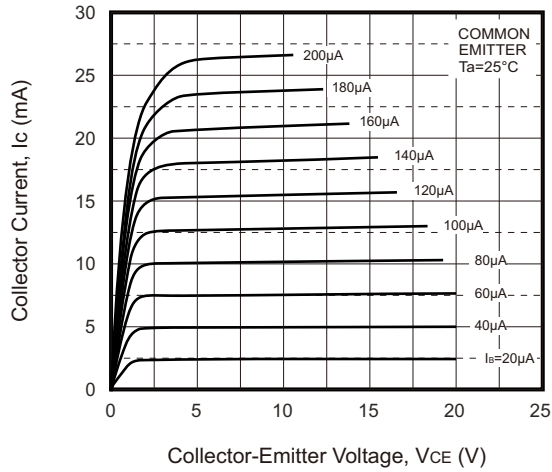


Fig.3 - $h_{FE} - I_c$

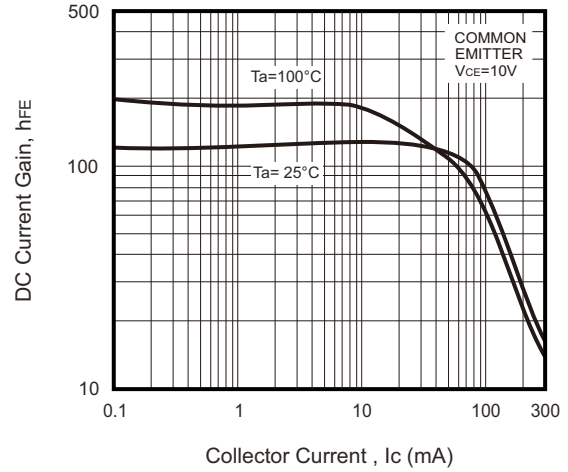


Fig.4 - $V_{BEsat} - I_c$

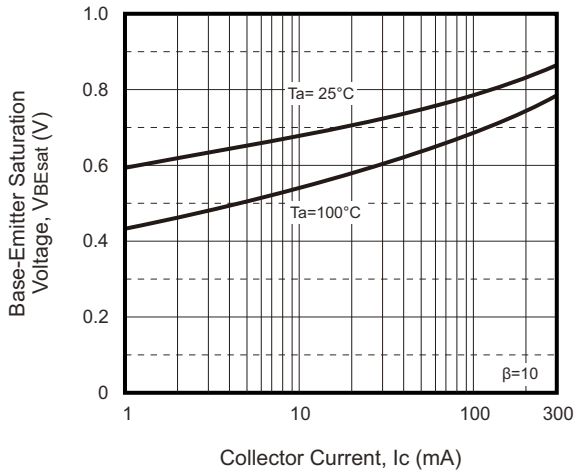


Fig.5 - $V_{CEsat} - I_c$

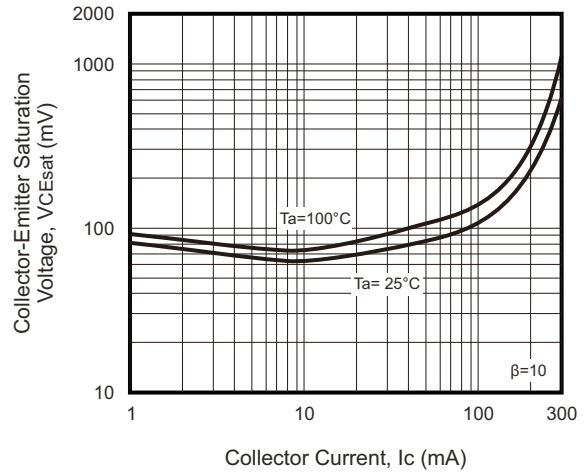


Fig.6 - $C_{ob}/C_{ib} - V_{CB}/V_{EB}$

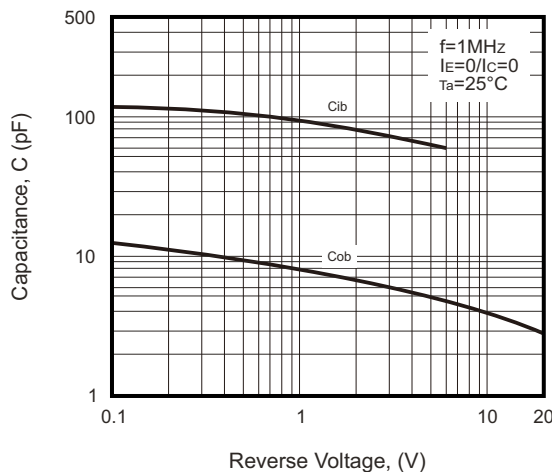
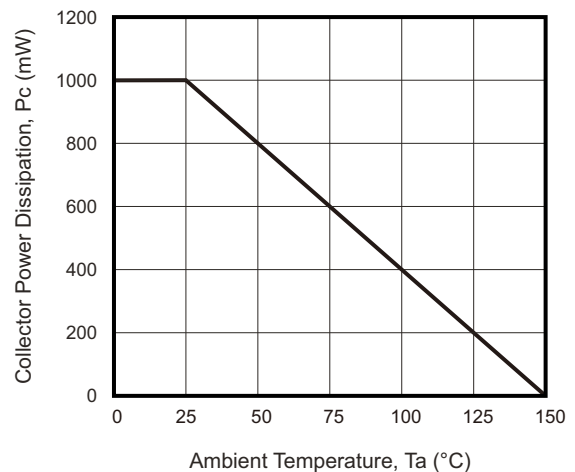
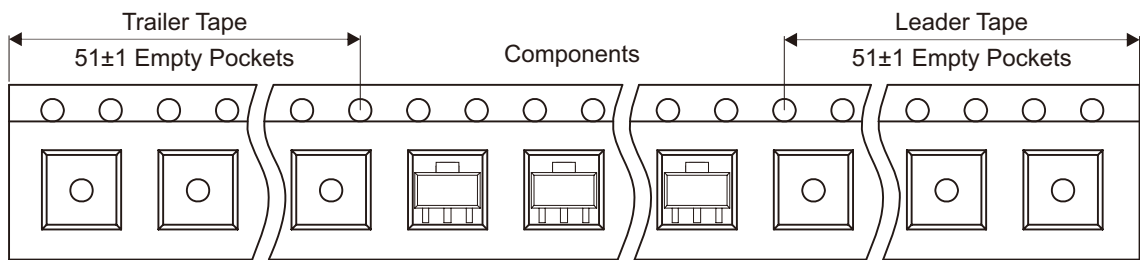
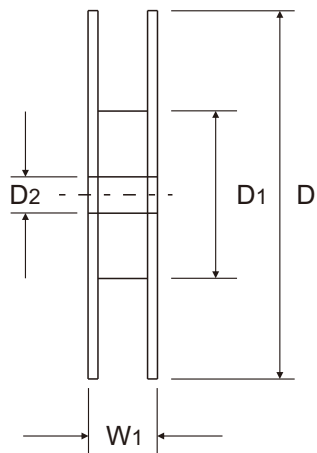
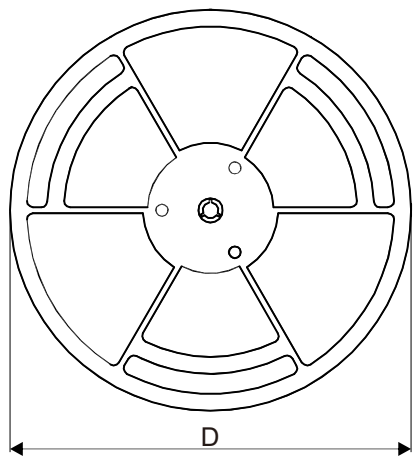
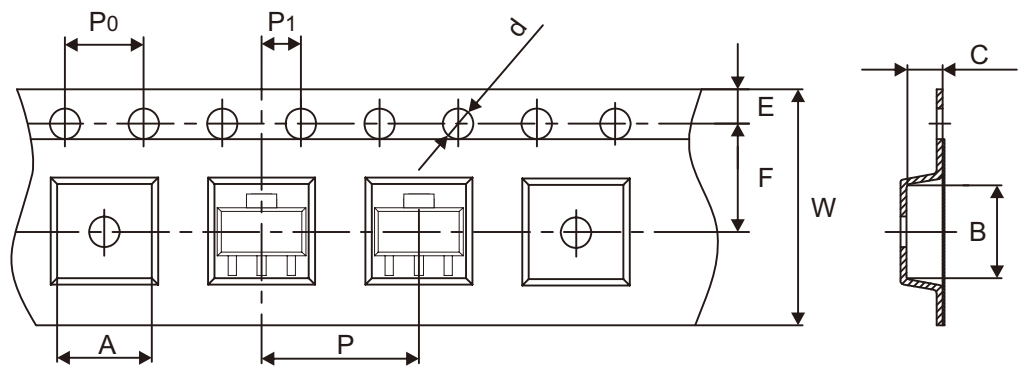


Fig.7 - $P_c - T_a$



Company reserves the right to improve product design, functions and reliability without notice.

Reel Taping Specification



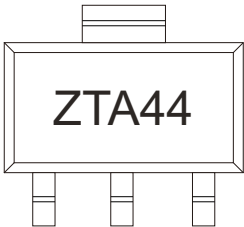
	SYMBOL	A	B	C	d	D	D1	D2
SOT-223	(mm)	6.765 ± 0.10	7.335 ± 0.10	1.88 ± 0.10	1.50 ± 0.10	330.00 ± 1.00	100.00 ± 1.00	13.00 ± 1.00
	(inch)	0.266 ± 0.004	0.289 ± 0.004	0.074 ± 0.004	0.059 ± 0.004	12.992 ± 0.039	3.937 ± 0.039	0.512 ± 0.039

	SYMBOL	E	F	P	P0	P1	W	W1
SOT-223	(mm)	1.75 ± 0.10	5.50 ± 0.10	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	12.00 ± 0.10	17.60 ± 1.00
	(inch)	0.069 ± 0.004	0.217 ± 0.004	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.472 ± 0.004	0.693 ± 0.039

Company reserves the right to improve product design , functions and reliability without notice.

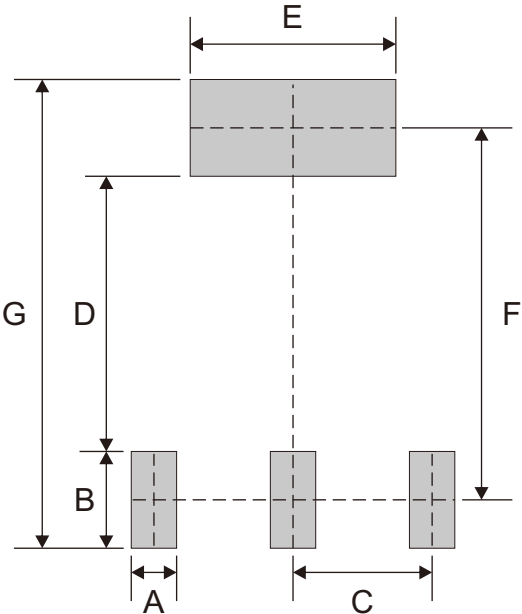
Marking Code

Part Number	Marking Code
PZTA44-G	ZTA44



Suggested PAD Layout

SIZE	SOT-223	
	(mm)	(inch)
A	0.75	0.030
B	1.60	0.063
C	2.30	0.091
D	4.55	0.179
E	3.40	0.134
F	6.15	0.242
G	7.75	0.305



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-223	2,500	13