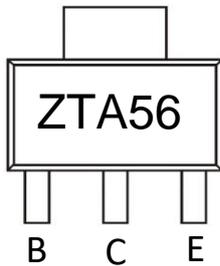


**Features**

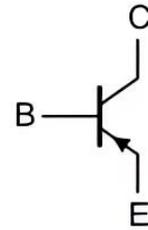
- Low Voltage and High Current
- General Purpose Amplifier Applications



Marking and pin assignment



SOT-223 top view



Schematic diagram



Halogen-Free

**Maximum Ratings(Ta=25°C unless otherwise noted)**

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-80	V
$V_{CEO}$	Collector-Emitter Voltage	-80	V
$V_{EBO}$	Emitter-Base Voltage	-4	V
$I_C$	Collector Current -Continuous	-500	mA
$P_C$	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	°C/W
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	°C

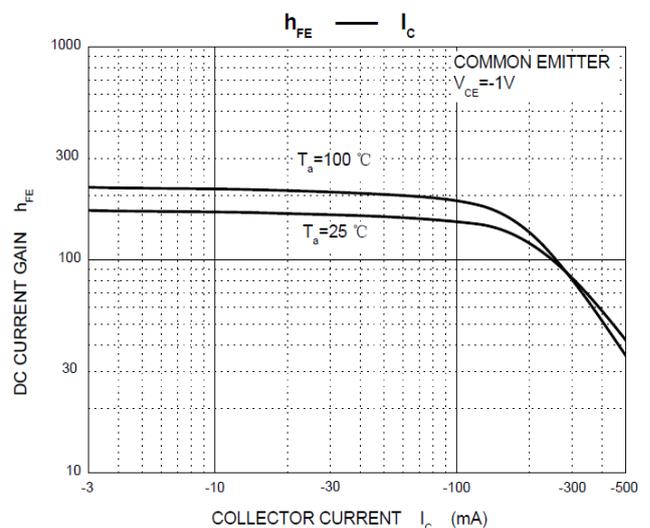
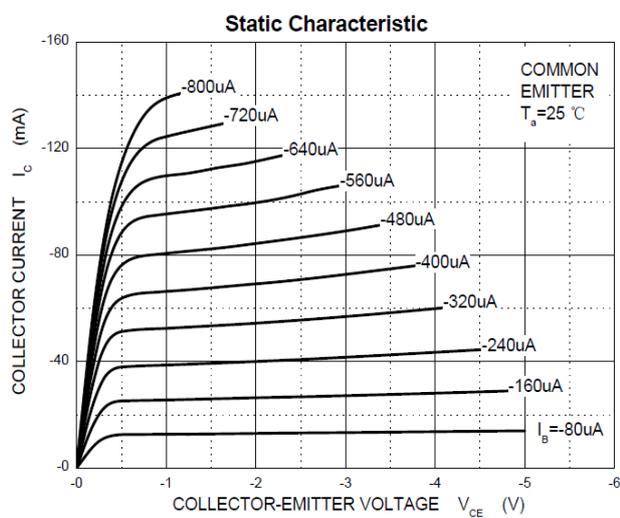
**Ordering Information (Example)**

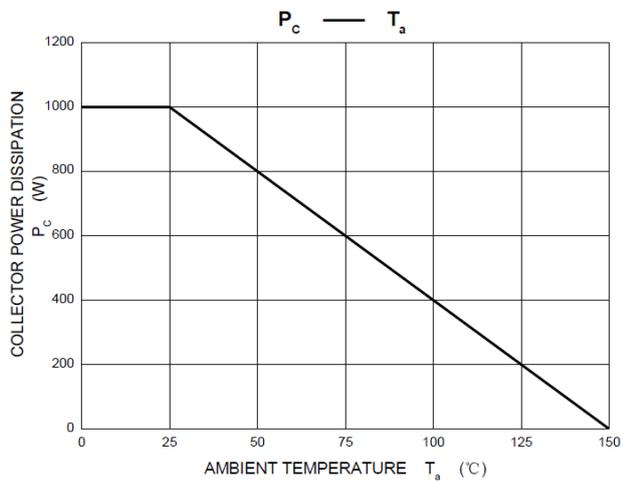
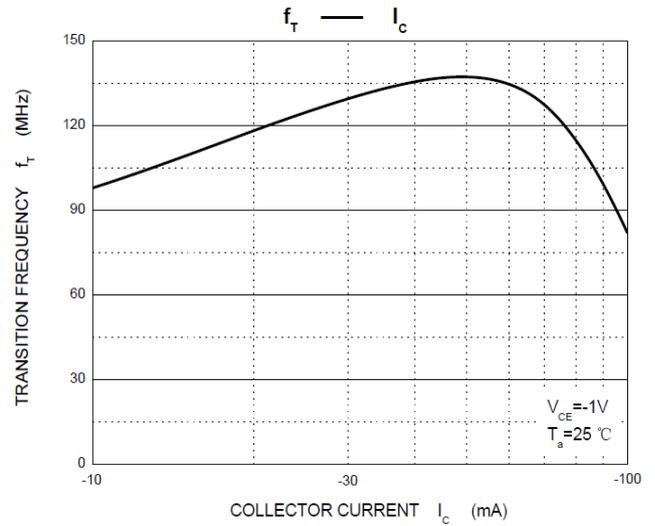
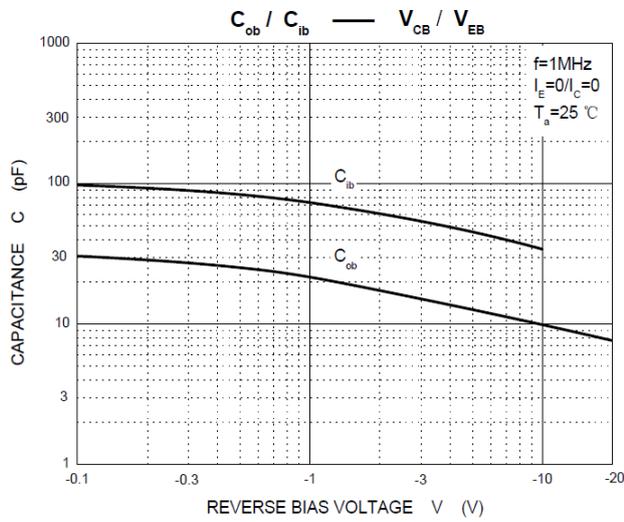
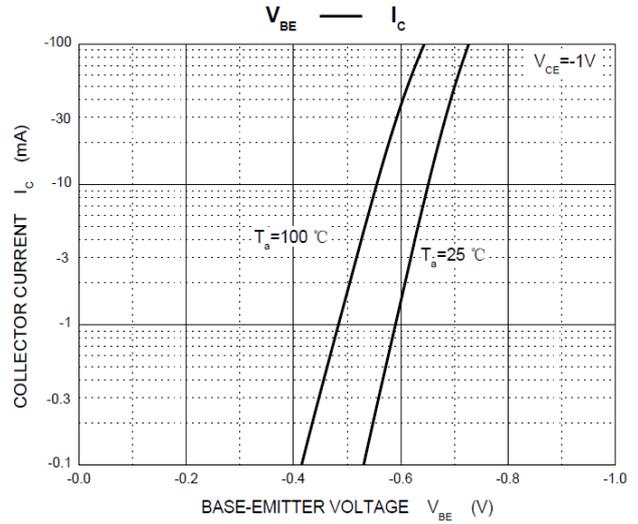
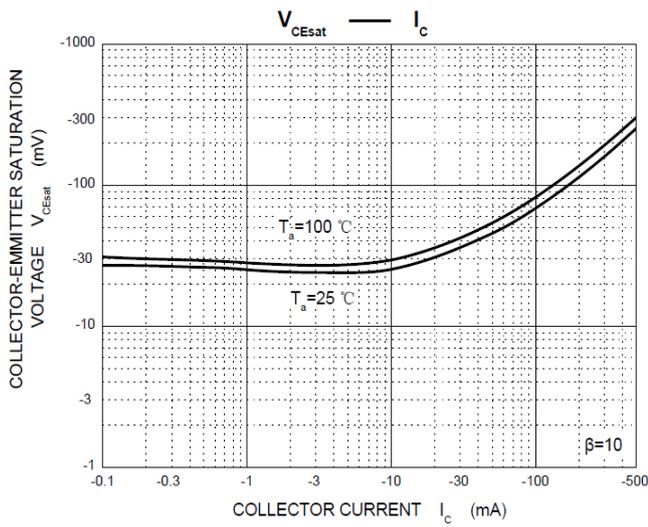
Type	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
PZTA56	ZTA56	2,500	5,000	35,000	13" reel

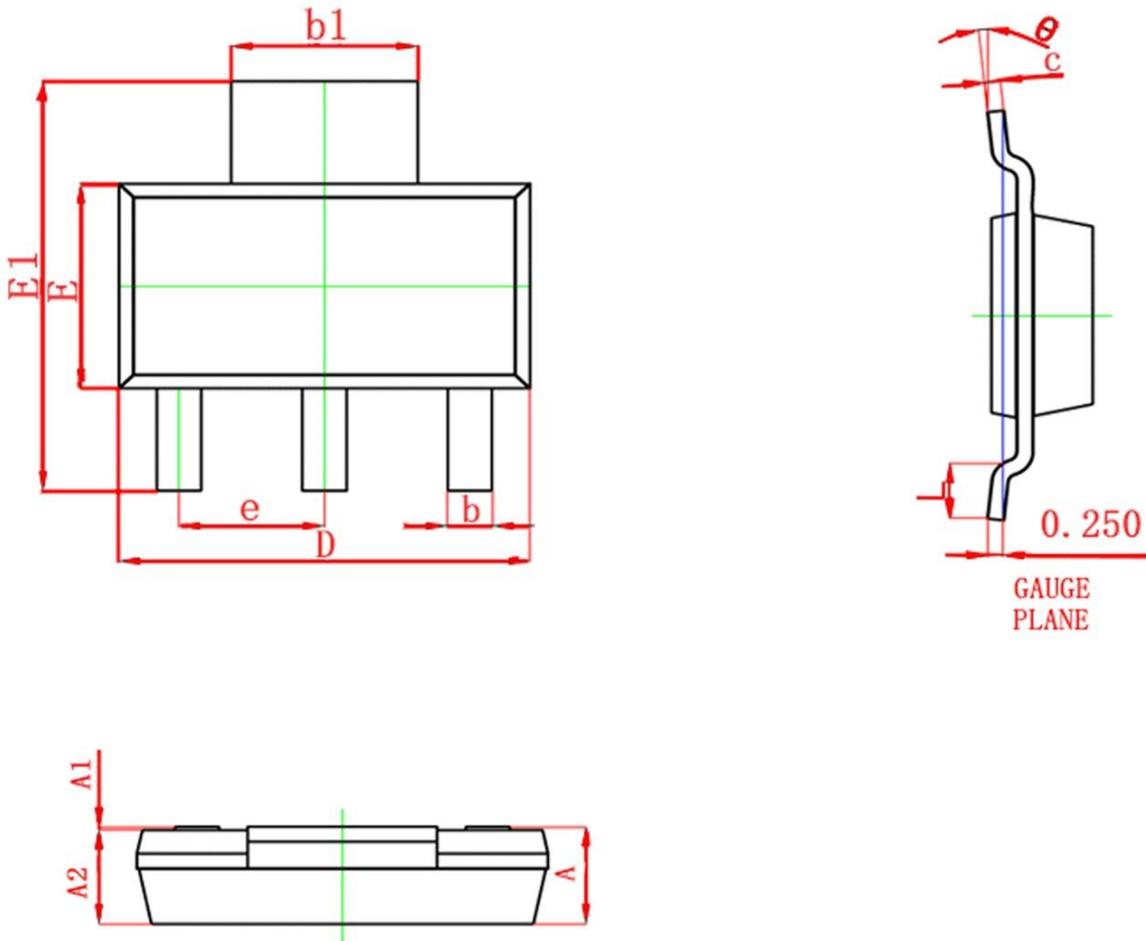
**Electrical Characteristics (T<sub>J</sub>=25°C unless otherwise noted)**

Symbol	Parameter	Condition	Min	Typ	Max	Unit
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =-0.1mA, I <sub>E</sub> =0	-80	--	--	V
V <sub>(BR)CEO*</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-80	--	--	V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =-0.1mA, I <sub>C</sub> =0	-4	--	--	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =-80V, I <sub>E</sub> =0	--	--	-100	nA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-60V, I <sub>B</sub> =0	--	--	-100	nA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-3V, I <sub>C</sub> =0	--	--	-100	nA
h <sub>FE1</sub>	DC current gain	V <sub>CE</sub> =-1V, I <sub>C</sub> =-10mA	100	--	--	--
h <sub>FE2</sub>		V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA	100	--	--	
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA	--	--	-0.25	V
V <sub>BE</sub>	Base-emitter voltage	V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA	--	--	-1.2	V
f <sub>T</sub>	Transition frequency	V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA, f=100MHz	50	--	--	MHz

\*Pulse test: pulse width ≤300μs, duty cycles ≤ 2.0%.

**Typical Characteristics**




**SOT-223 Package information**


Symbol	Dimensions in Millimeters(mm)		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	3.300	3.700	0.130	0.146
E1	6.700	7.300	0.264	0.287
e	2.300(BSC)		0.091(BSC)	
L	0.750	--	0.030	--
θ	0°	10°	0°	10°