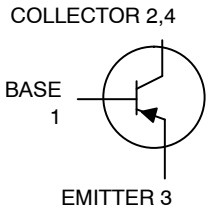
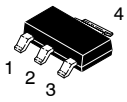
High Voltage Transistor
PNP Silicon
PZTA96ST1G





SOT−223 (TO−261)
CASE 318E
STYLE 1

Features

- These Devices are Pb−Free, Halogen Free/BFR Free and are RoHS Compliant

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector−Emitter Voltage	V_{CEO}	−450	Vdc
Collector−Base Voltage	V_{CBO}	−450	Vdc
Emitter−Base Voltage	V_{EBO}	−5.0	Vdc
Collector Current	I_C	−500	mAdc
Total Power Dissipation Up to T_A = 25°C (Note 1)	P_D	1.5	W
Storage Temperature Range	T_{stg}	−65 to +150	°C
Junction Temperature	T_J	150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. Device mounted on a glass epoxy printed circuit board 1.575 in. x 1.575 in. x 0.059 in.; mounting pad for the collector lead min. 0.93 in^2.

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction−to−Ambient (Note 2)	$R_{\theta JA}$	83.3	°C

2. Device mounted on a glass epoxy printed circuit board 1.575 in. x 1.575 in. x 0.059 in.; mounting pad for the collector lead min. 0.93 in^2.

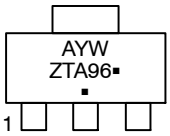
ELECTRICAL CHARACTERISTICS (Note 3)

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Collector−Emitter Breakdown Voltage (I_C = −1.0 mAdc, I_B = 0)	$V_{(BR)CEO}$	−450	−	Vdc
Collector−Emitter Breakdown Voltage (I_C = −100 μAdc, I_E = 0)	$V_{(BR)CBO}$	−450	−	Vdc
Emitter−Base Breakdown Voltage (I_E = −10 μAdc, I_C = 0)	$V_{(BR)EBO}$	−5.0	−	Vdc
Collector−Base Cutoff Current (V_{CB} = −400 Vdc, I_E = 0)	I_{CBO}	−	−0.1	μAdc
Emitter−Base Cutoff Current (V_{BE} = −4.0 Vdc, I_C = 0)	I_{EBO}	−	−0.1	μAdc
ON CHARACTERISTICS				
DC Current Gain (Note 4) (I_C = −10 mAdc, V_{CE} = −10 Vdc)	h_{FE}	50	150	−
Saturation Voltages (I_C = −20 mAdc, I_B = −2.0 mAdc) (I_C = −20 mAdc, I_B = −2.0 mAdc)	$V_{CE(sat)}$ $V_{BE(sat)}$	− −	−0.6 −1.0	Vdc

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

3. T_A = 25°C unless otherwise noted.
4. Pulse Test: Pulse Width ≤ 300 μs; Duty Cycle = 2.0%.

MARKING DIAGRAM



A = Assembly Location
Y = Year
W = Work Week
▪ = Pb−Free Package

(Note: Microdot may be in either location)

ORDERING INFORMATION

Device	Package	Shipping†
PZTA96ST1G	SOT−223 (Pb−Free)	1000/Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

TYPICAL CHARACTERISTICS

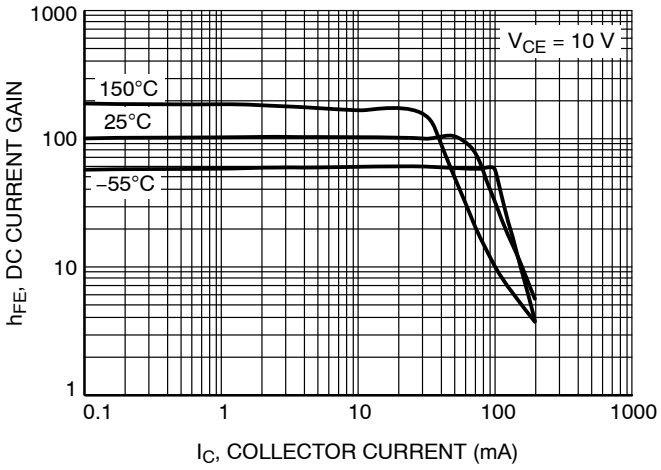


Figure 1. DC Current Gain

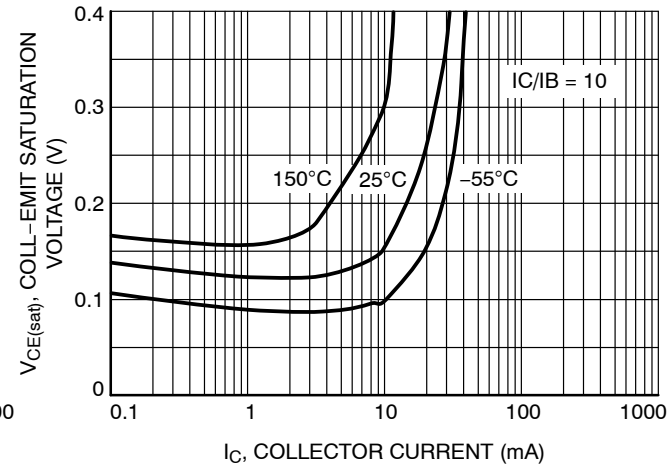


Figure 2. Collector−Emitter Saturation Voltage

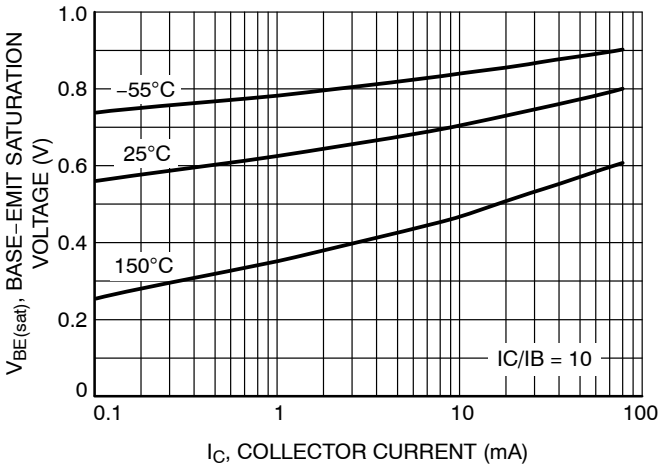


Figure 3. Base−Emitter Saturation Voltage

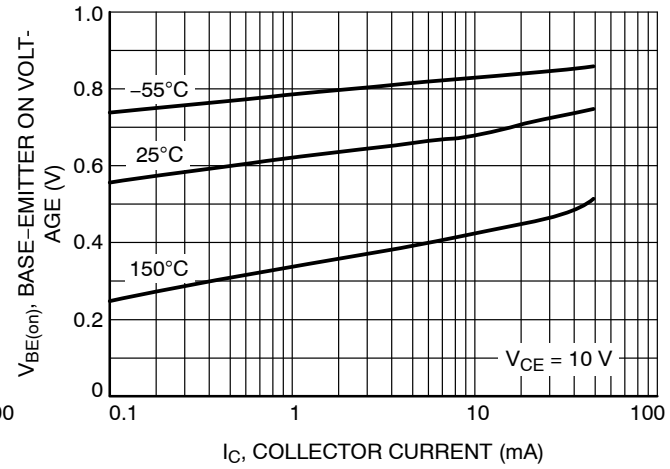


Figure 4. Base−Emitter “On” Voltage

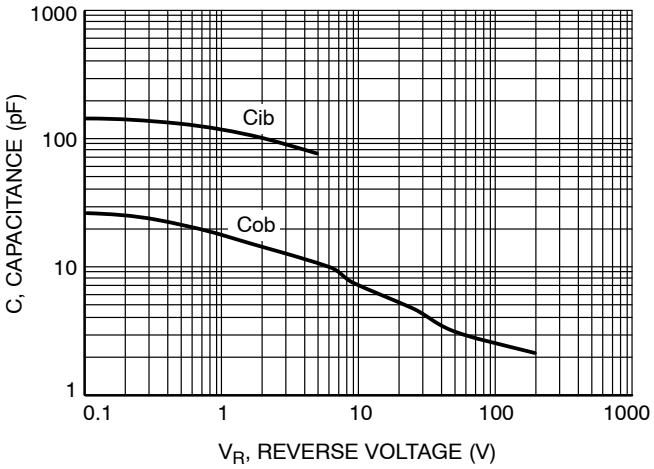


Figure 5. Capacitances

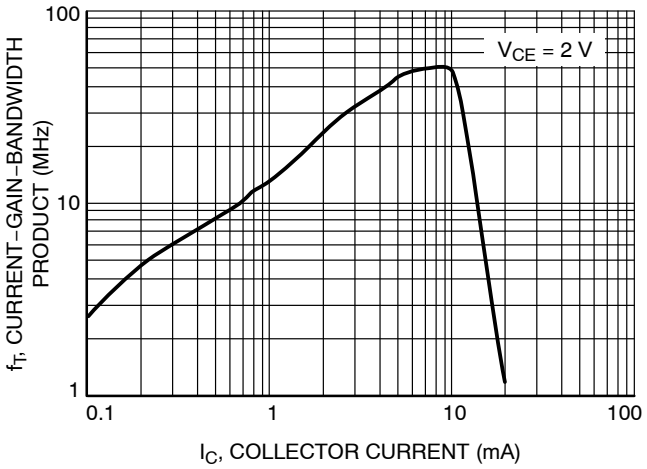


Figure 6. Current−Gain−Bandwidth Product

ADDITIONAL INFORMATION

TECHNICAL PUBLICATIONS:
Technical Library: www.onsemi.com/design/resources/technical−documentation
onsemi Website: www.onsemi.com

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