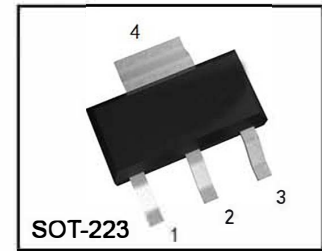
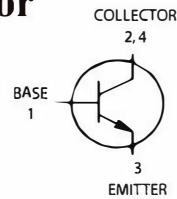


## NPN Silicon Planar Epitaxial Transistor



### ● ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V <sub>CEO</sub>	300	V
Collector-Base Voltage	V <sub>CBO</sub>	300	V
Emitter-Base Voltage	V <sub>EBO</sub>	6	V
Collector Current (DC)	I <sub>C(DC)</sub>	500	mA
Total Device Dissipation T <sub>A</sub> =25°C	P <sub>D</sub>	2	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage, Temperature	T <sub>stg</sub>	-55 to +150	°C

### ● Device Marking

ZTA42
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### ● ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage (I <sub>C</sub> =1mA)	V <sub>(BR)CEO</sub>	300	-	-	V
Collector-Base Breakdown Voltage (I <sub>C</sub> =100μA)	V <sub>(BR)CBO</sub>	300	-	-	V
Emitter-Base Breakdown Voltage (I <sub>E</sub> =10 μA)	V <sub>(BR)EBO</sub>	6	-	-	V
Collector-Emitter Cutoff Current (V <sub>CB</sub> =300V)	I <sub>CBO</sub>	-	-	100	nA
Emitter-Base Cutoff Current (V <sub>EB</sub> =6V)	I <sub>EBO</sub>	-	-	100	nA

## ● ON CHARACTERISTICS

DC Current Gain ( $V_{CE} = 10V, I_C = 1mA$ ) ( $V_{CE} = 10V, I_C = 10mA$ ) ( $V_{CE} = 10V, I_C = 30mA$ )	$h_{FE1}$ $h_{FE2}$ $h_{FE3}$	25 40 40	- - -	- - -	- - -
Collector-Emitter Saturation Voltages ( $I_C = 20mA, I_B = 2mA$ )	$V_{CE(sat)}$	-	-	500	mV
Base-Emitter Saturation Voltages ( $I_C = 20mA, I_B = 2mA$ )	$V_{BE(sat)}$	-	-	900	mV

## ● DYNAMIC CHARACTERISTICS

Current-Gain—Bandwidth Product ( $V_{CE} = 20V, I_C = 10mA, f = 100MHz$ )	$f_T$	50	-	-	MHz
Output Capacitance ( $V_{CB} = 20Vdc, f = 1MHz$ )	$C_{ob}$	-	-	3	pF

### Typical Characteristics

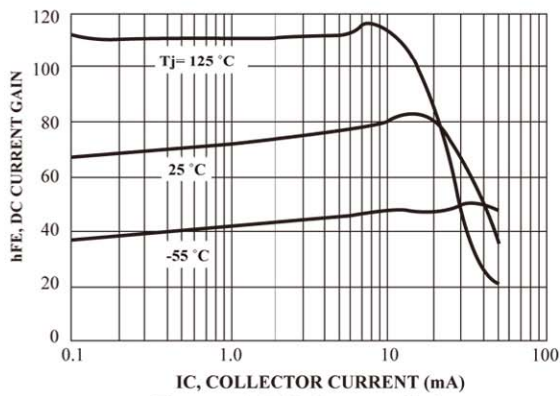


Figure .1 DC Current Gain

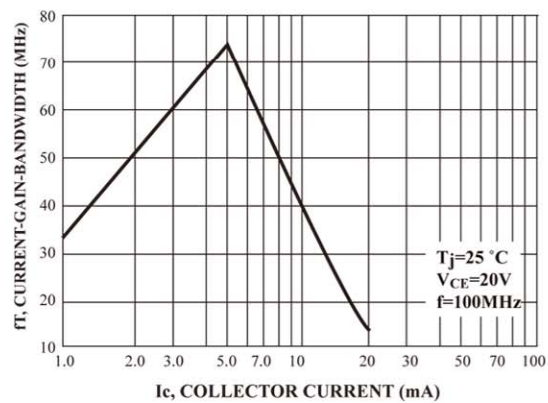


Figure .2 Current-Gain-Bandwidth

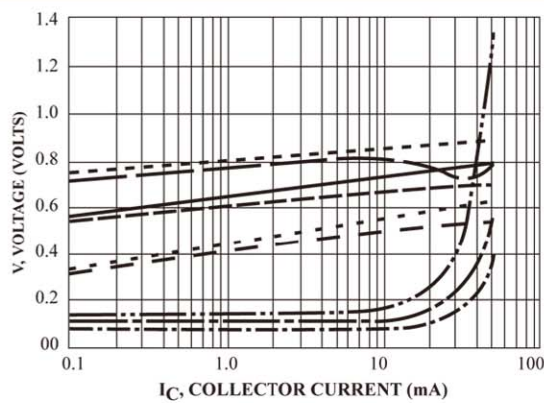
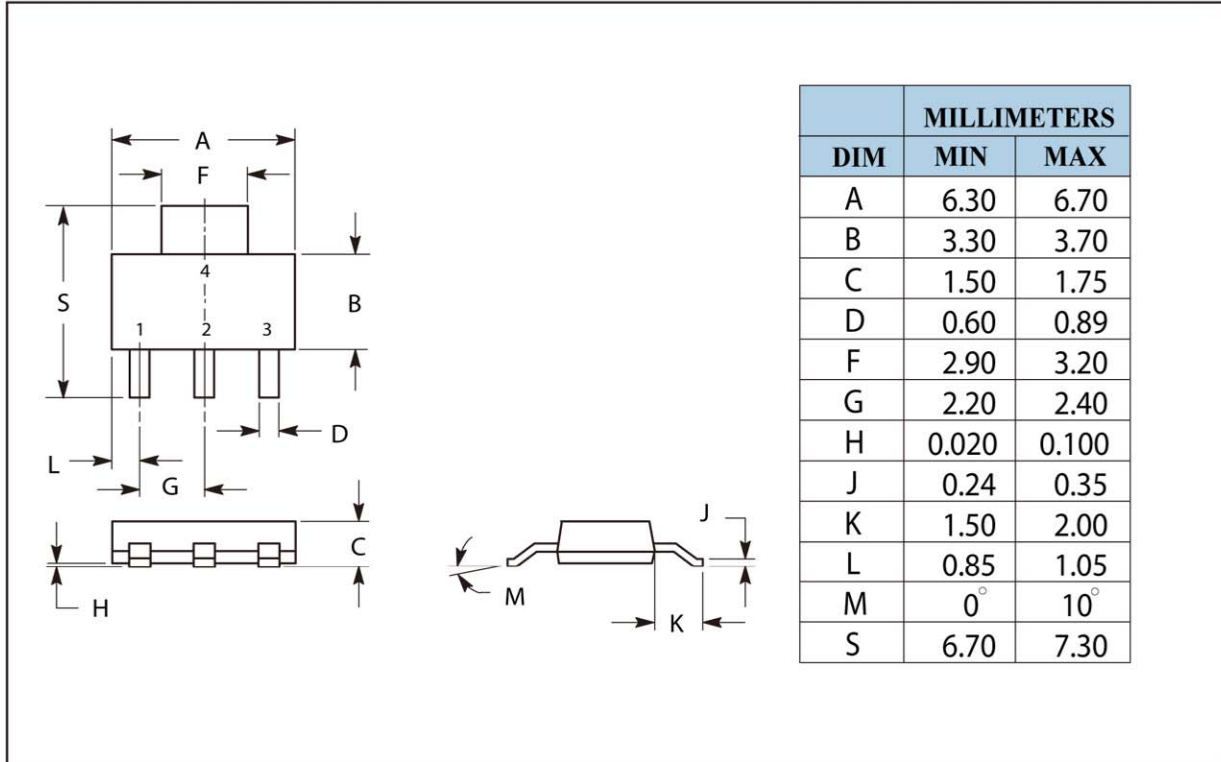


Figure.3 "On" Voltages

- $V_{CE(sat)}$ @25 °C,  $I_{CIB} = 10$
- - -  $V_{CE(sat)}$ @125 °C,  $I_{CIB} = 10$
- · ·  $V_{CE(sat)}$ @ -55 °C,  $I_{CIB} = 10$
- $V_{BE(sat)}$ @25 °C,  $I_{CIB} = 10$
- - -  $V_{BE(sat)}$ @125 °C,  $I_{CIB} = 10$
- · ·  $V_{BE(sat)}$ @ -55 °C,  $I_{CIB} = 10$
- $V_{BE(on)}$ @25 °C,  $V_{CE} = 10V$
- - -  $V_{BE(on)}$ @125 °C,  $V_{CE} = 10V$
- · ·  $V_{BE(on)}$ @ -55 °C,  $V_{CE} = 10V$

## SOT-223 Outline Dimensions

unit:mm



单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)