

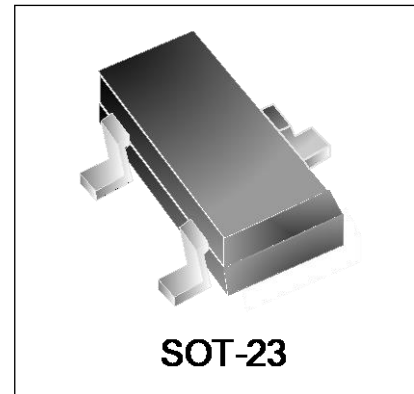
## PNP Silicon Transistor

## Features

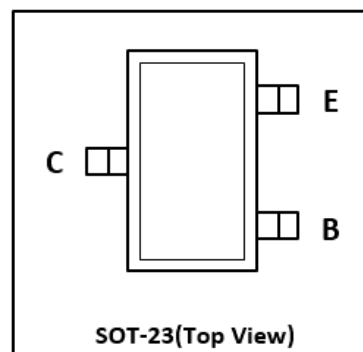
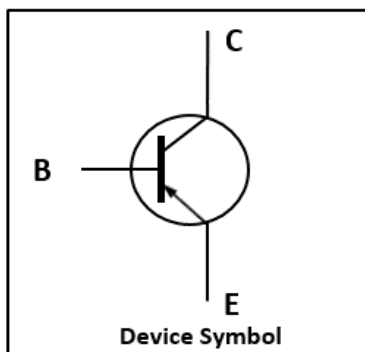
- Epitaxial Planar Die Construction
- Ideal for Low Power Amplification and Switching

## Mechanical Characteristics

- SOT-23 Package
- Marking : Making Code
- RoHS Compliant



## Schematic &amp; PIN Configuration



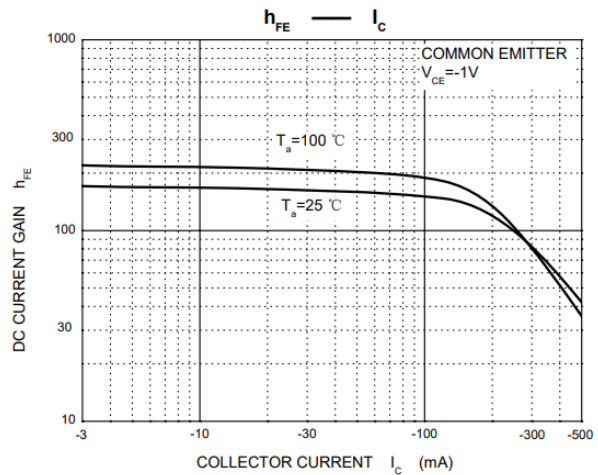
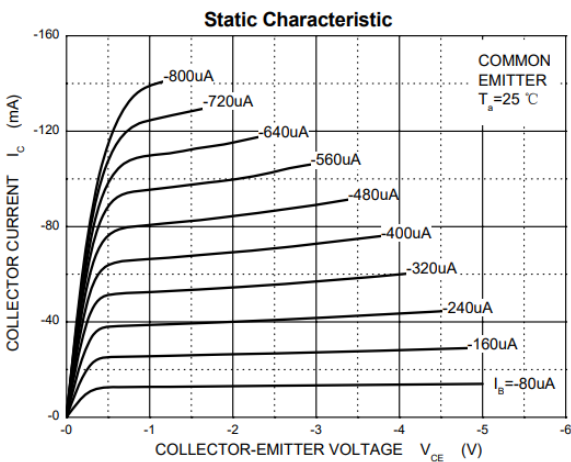
## Absolute Maximum Rating

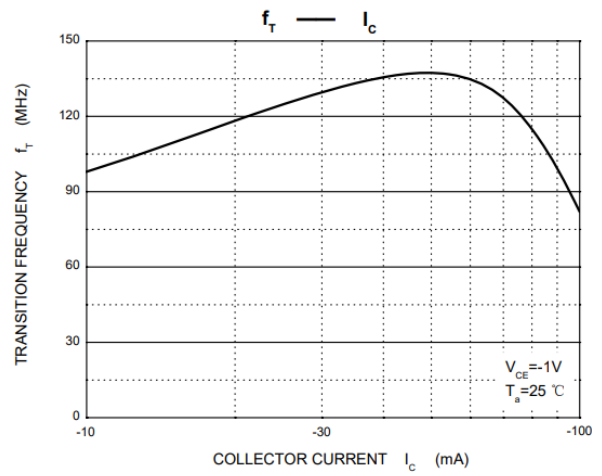
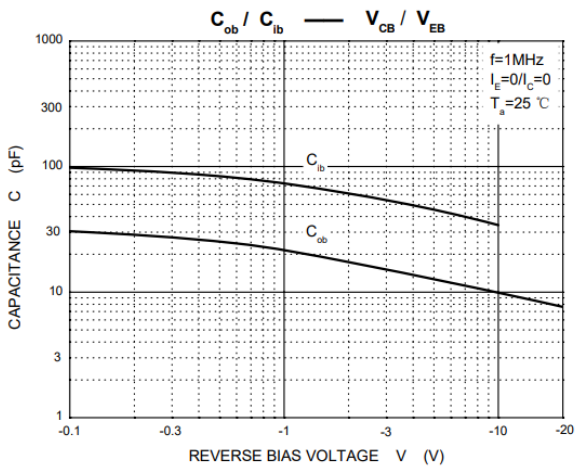
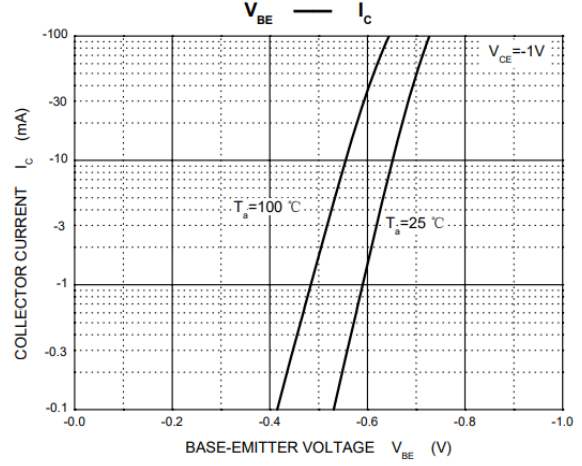
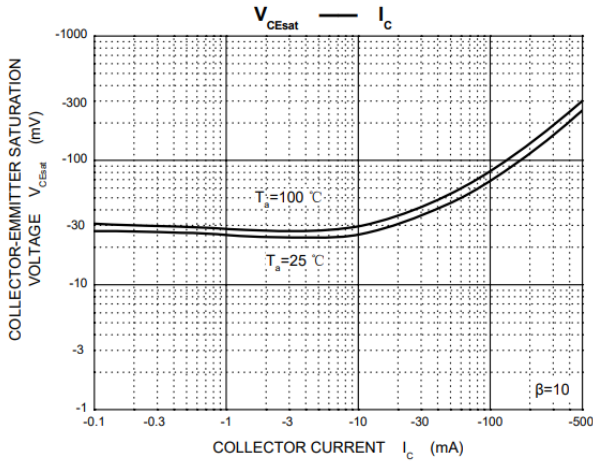
Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	-80	V
Collector Emitter Voltage	$V_{CEO}$	-80	V
Emitter Base Voltage	$V_{EBO}$	-4	V
Collector Current	$I_C$	-500	mA
Power Dissipation	$P_D$	310	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 ~ 150	°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	403	°C/W

**Electrical Characteristics ( $T_{amb}=25^{\circ}C$  unless otherwise specified)**

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-80	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-80	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu A, I_C = 0$	-4	-	-	V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -80V, I_E = 0$	-	-	-100	nA
Collector Cut-off Current	$I_{CEO}$	$V_{CE} = -60V, I_B = 0$	-	-	-100	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -3V, I_C = 0$	-	-	-100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -10mA$	100	-	400	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -100mA$	100	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$	-	-	-0.25	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -1V, I_C = -100mA$	-	-	-1.20	V
Transition Frequency	$f_T$	$V_{CE} = -1V, I_C = -100mA, f = 100MHz$	50	-	-	MHz

**Typical Characteristics**





### Outline Drawing – SOT-23

#### PACKAGE OUTLINE

**SOT-23**

DIMENSIONS				
SYMBOL	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.90	1.15	0.035	0.045
A1	0.00	0.10	0.000	0.004
b	0.30	0.50	0.012	0.020
c	0.08	0.15	0.003	0.006
D	2.80	3.00	0.110	0.118
E	2.25	2.55	0.089	0.100
E1	1.20	1.40	0.047	0.055
e	0.95 BSC		0.0374 BSC	
e1	1.80	2.00	0.071	0.079
L	0.30	0.50	0.012	0.020
θ	0	8°	0	8°

DIMENSIONS		
DIM	MILLIMETERS	INCHES
M	0.0795	2.02
C	0.0315	0.80
Z	0.111	2.82
e	0.037 BSC	0.95 BSC
e1	0.075 BSC	1.9 BSC
b	0.0315	0.80

#### Notes

1. Dimensioning and tolerances per ANSI Y14.5M, 1985.
2. Controlling Dimension: Inches
3. Pin 3 is the cathode (Unidirectional Only).
4. Dimensions are exclusive of mold flash and metal burrs.

### Marking Codes

Part Number	WTA56
Marking Code	

### Package Information

Qty: 3k/Reel

### CONTACT INFORMATION

No.1001, Shiwan (7) Road, Pudong District, Shanghai, P.R.China.201207  
 Tel: 86-21-68969993 Fax: 86-21-50757680 Email: [market@way-on.com](mailto:market@way-on.com)  
 WAYON website: <http://www.way-on.com>  
 For additional information, please contact your local Sales Representative.

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Specifications are subject to change without notice.  
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.