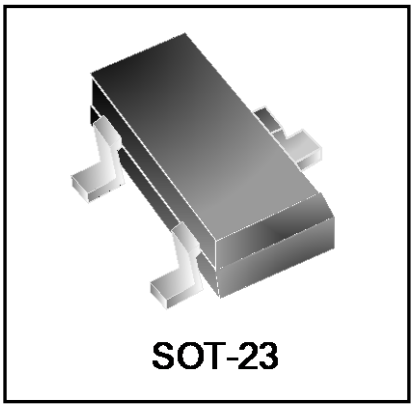
WT9015

PNP Silicon Transistor

Features

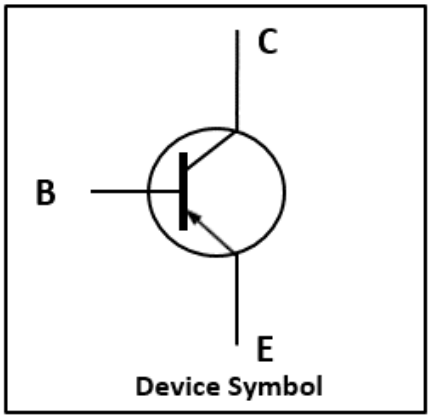
- Complementary to WT9014

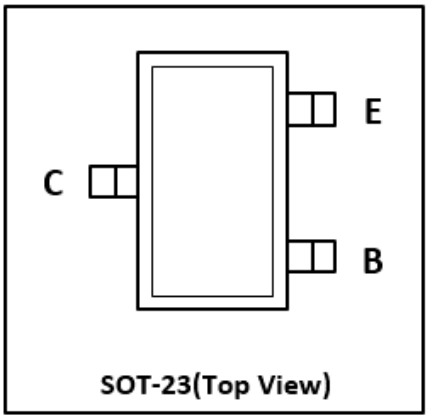


Mechanical Characteristics

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

Schematic & PIN Configuration





Absolute Maximum Rating

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	-50	V
Collector Emitter Voltage	V_{CEO}	-45	V
Emitter Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ 150	°C

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Electrical Characteristics (T_{amb}=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = -100μA, I_E = 0	-50	-	-	V
Collector-Emitter Breakdown Voltage [1]	$V_{(BR)CEO}$	I_C = -0.1mA, I_B = 0	-45	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = -100μA, I_C = 0	-5	-	-	V
Collector Cut-off Current	I_{CBO}	V_{CB} = -50V, I_E = 0	-	-	-100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB} = -5V, I_C = 0	-	-	-100	nA
DC Current Gain [1]	$h_{FE(1)}$	V_{CE} = -5V, I_C = -1mA	200	-	400	-
Collector-Emitter Saturation Voltage [1]	$V_{CE(sat)}$	I_C = -100mA, I_B = -10mA	-	-	-0.3	V
Base-Emitter Saturation Voltage [1]	$V_{BE(sat)}$	I_C = -100mA, I_B = -10mA	-	-	-1	V
Transition Frequency	f_T	V_{CE}= -5V,I_C= -10mA,f=30MHz	150	-	-	MHz

Note:

1. Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%

Typical Characteristics

Figure 1. Static Characteristics

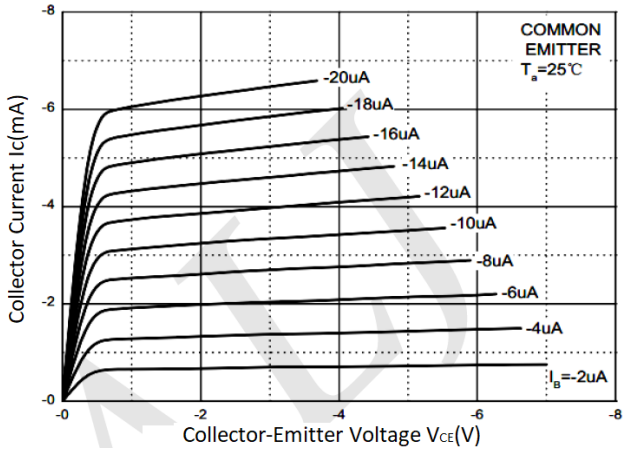


Figure 2. h_{FE} vs. I_C

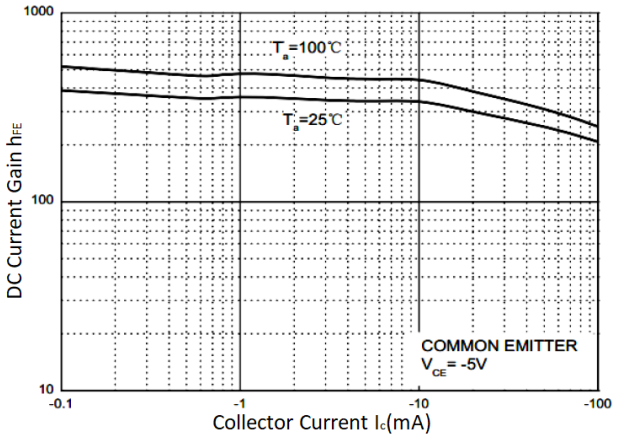


Figure 3. $V_{BE(sat)}$ vs. I_C

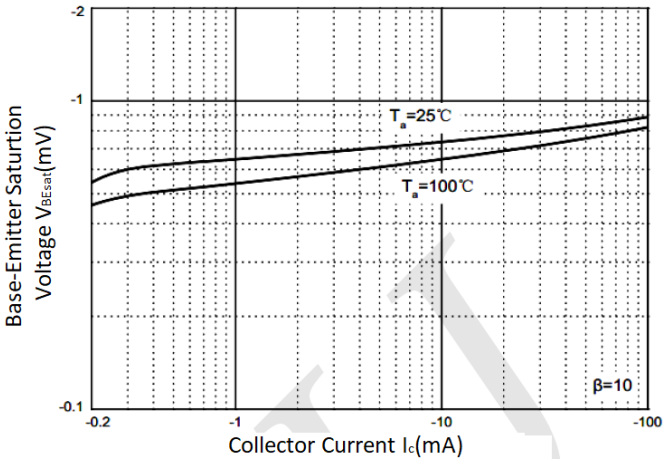


Figure 4. $V_{CE(sat)}$ vs. I_C

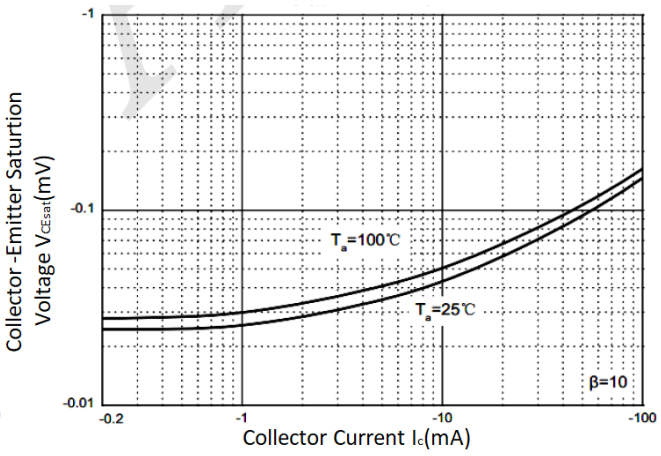


Figure 5. I_C vs. V_{BE}

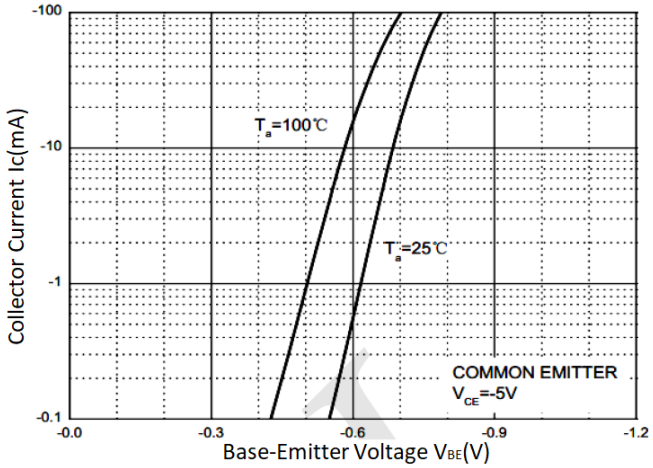


Figure 6. C_{ob} / C_{ib} vs. V_{CB} / V_{EB}

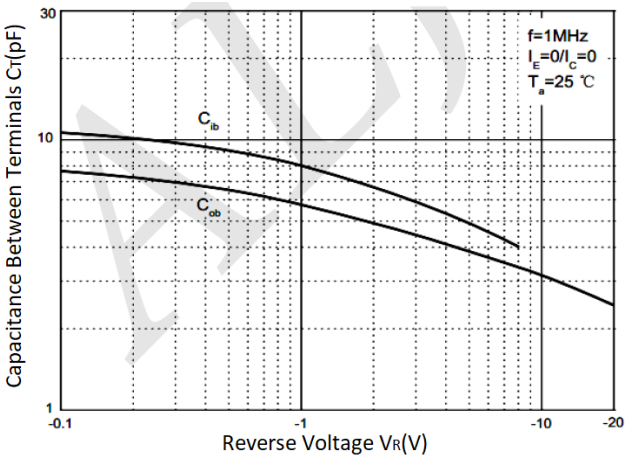


Figure 7. f_T vs. I_C

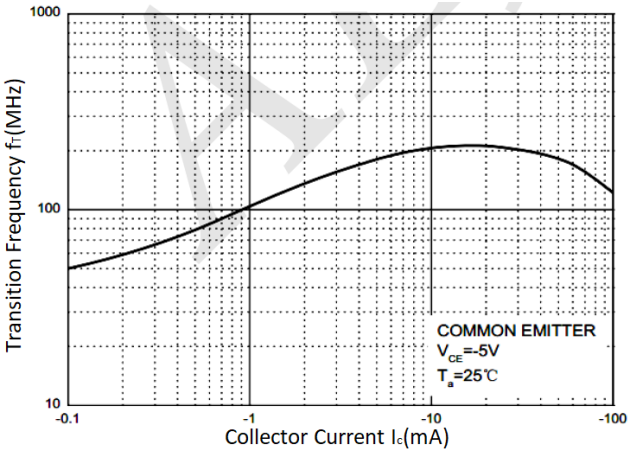
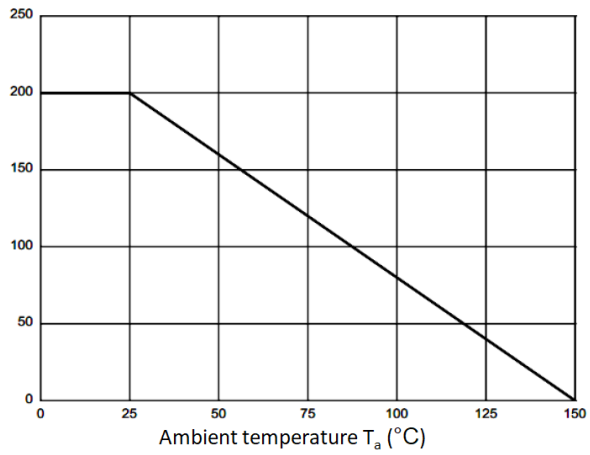
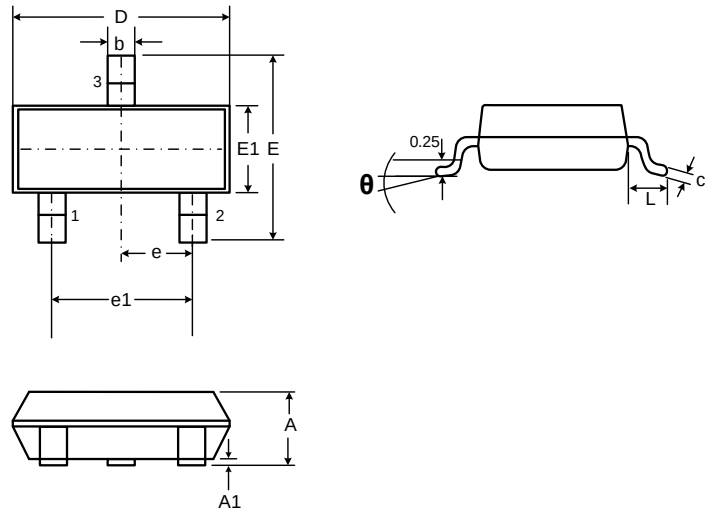


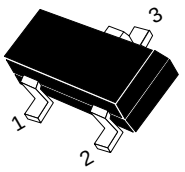
Figure 8. P_C vs. T_a



Outline Drawing – SOT-23

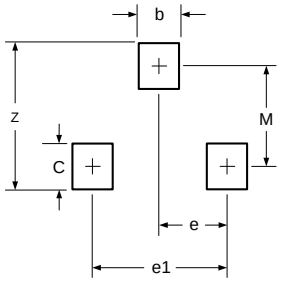
PACKAGE OUTLINE





SOT-23

DIMENSIONS				
SYMBOL	MILLIMETER		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	**INCHES**	**MILLIMETERS**
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	WT9015
Marking Code	M6

Package Information

Qty：3k/Reel

CONTACT INFORMATION

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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.