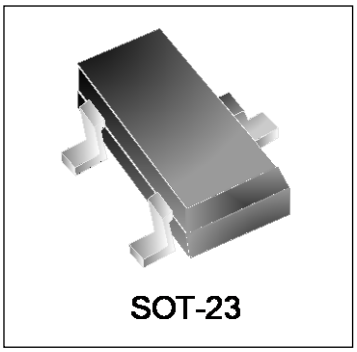
WT2907A-AT

PNP Silicon Transistor



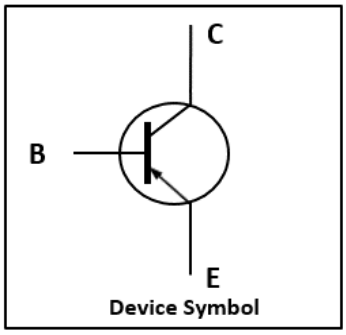
Features

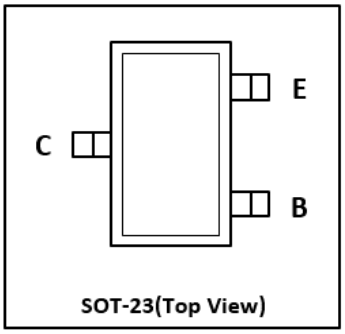
- Epitaxial Planar Die Construction
- Low Saturation Voltage
- AEC-Q101 Qualified

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}	-60	V
Collector Emitter Voltage	V_{CEO}	-60	V
Emitter Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-600	mA
Total Device Dissipation	P_D	225	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ 150	°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500	°C/W

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

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = -10μA, I_E = 0	-60	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = -10mA, I_B = 0	-60	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = -10μA, I_C = 0	-5	-	-	V
Collector Cut-Off Current	I_{CBO}	V_{CB} = -50V,I_E = 0	-	-	-20	nA
Collector Cut-Off Current	I_{CEX}	V_{CE} = -30V,$V_{EB(off)}$ = -0.5V	-	-	-50	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB} = -3V,I_C = 0	-	-	-10	nA
DC Current Gain	$h_{FE(1)}$	V_{CE} = -10V, I_C = -0.1mA	75	-	-	
	$h_{FE(2)}$	V_{CE} = -10V, I_C = -1mA	100	-	-	
	$h_{FE(3)}$	V_{CE} = -10V, I_C = -10mA	100	-	-	
	$h_{FE(4)}$	V_{CE} = -10V, I_C = -150mA	100	-	300-	
	$h_{FE(5)}$	V_{CE} = -10V, I_C = -500mA	50	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = -150mA,I_B = -15mA	-	-	-0.4	V
		I_C = -500mA,I_B = -50mA	-	-	-1.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = -150mA,I_B = -15mA	-	-	-1.3	V
		I_C = -500mA,I_B = -50mA	-	-	-2.6	V
Transition Frequency	f_T	V_{CE}=-20V,I_C=-50mA,f=100MHz	200	-	-	MHz
Delay Time	t_d	V_{CC} = -30V, I_C = -150mA, I_{B1} = -15mA	-	-	10	ns
Rise Time	t_r		-	-	25	ns
Storage Time	t_s	V_{CC} = -6V, I_C = -150mA, I_{B1} = -I_{B2} = -15mA	-	-	225	ns
Fall Time	t_f		-	-	60	ns

Typical Characteristics

Figure 1.Static Characteristics

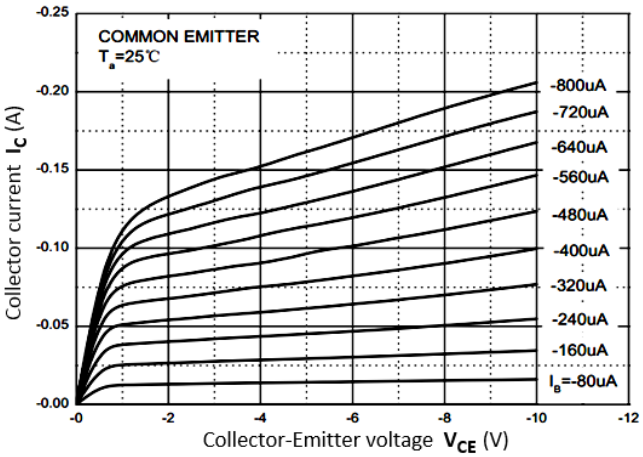


Figure 2. h_{FE} vs. I_C

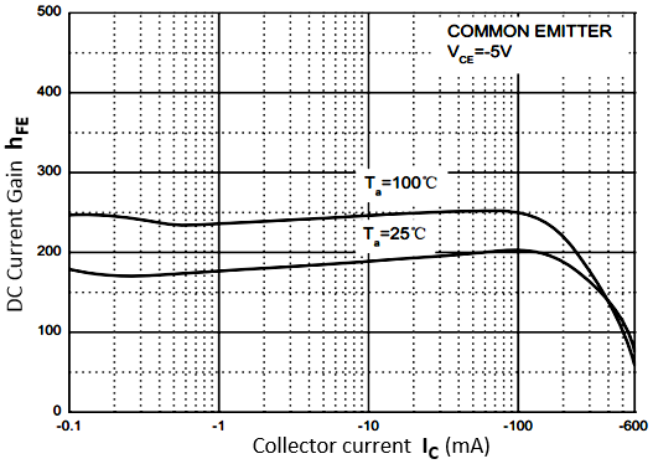


Figure 3. $V_{CE(sat)}$ vs. I_C

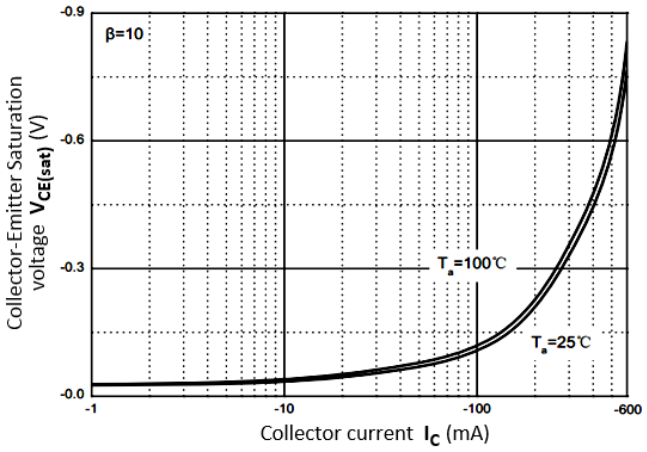


Figure 4. $V_{BE(sat)}$ vs. I_C

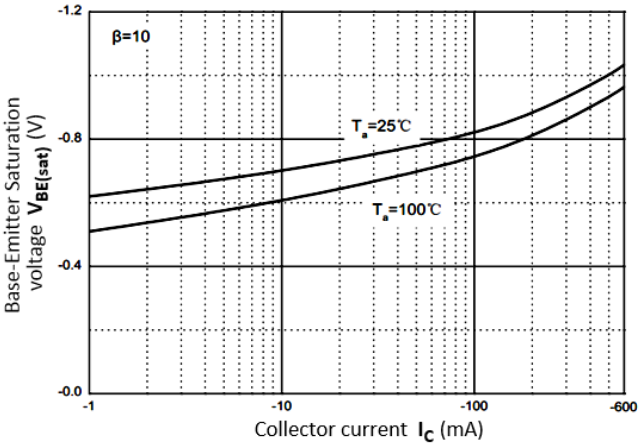


Figure 5. I_C vs. V_{BE}

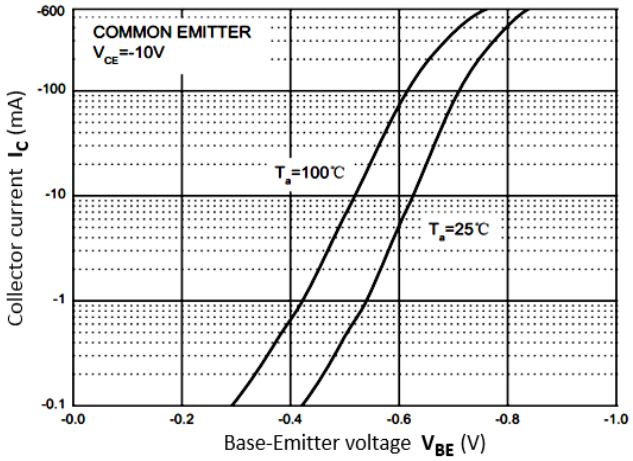


Figure 6. C_{ob} / C_{ib} vs. V_{CB} / V_{EB}

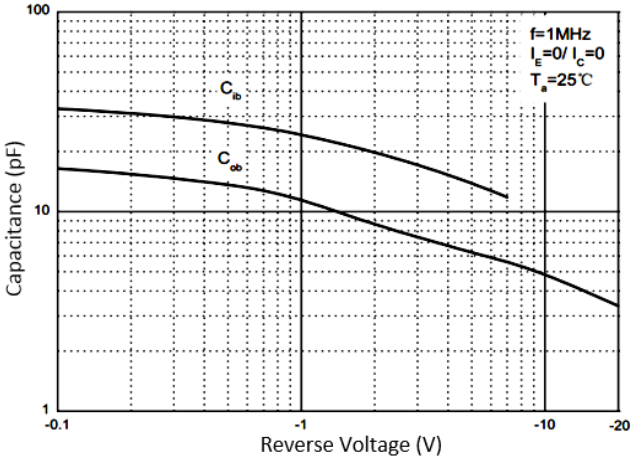
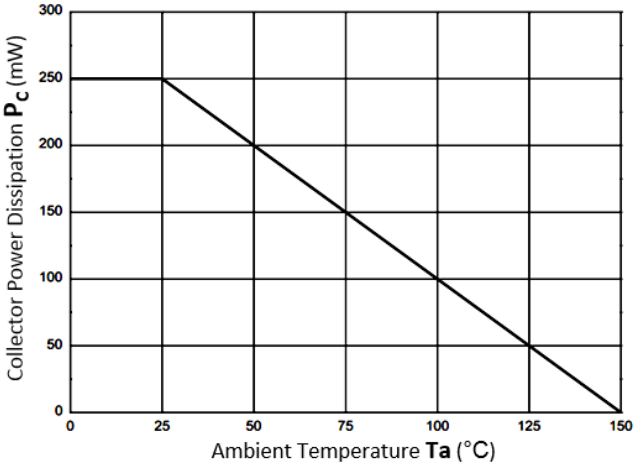
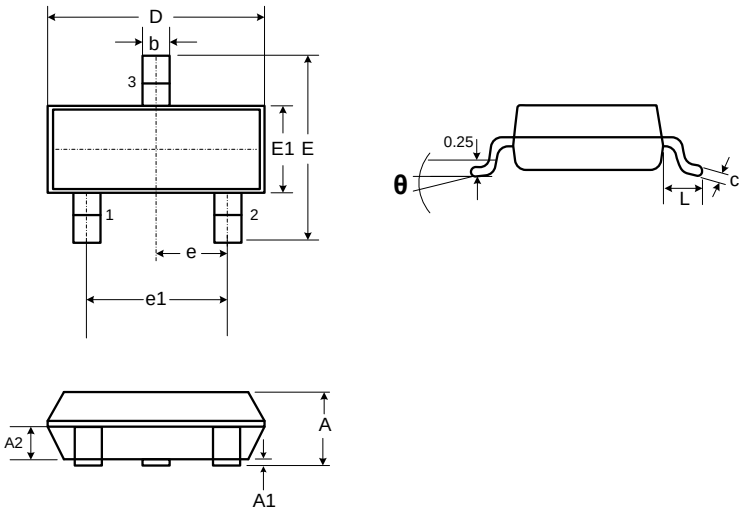


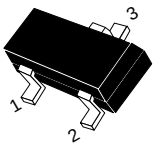
Figure 7. P_C vs. T_a



Outline Drawing – SOT-23

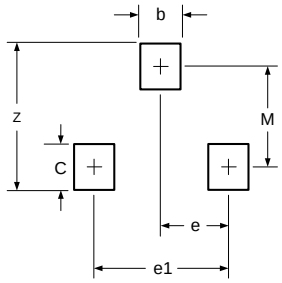
PACKAGE OUTLINE





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
A2	0.60	0.70	0.0236	0.0275
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	WT2907A-AT
Marking Code	2F

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
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.