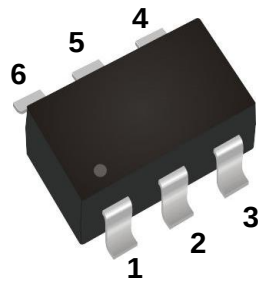
WT5551DW

Dual NPN Transistor

Features

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

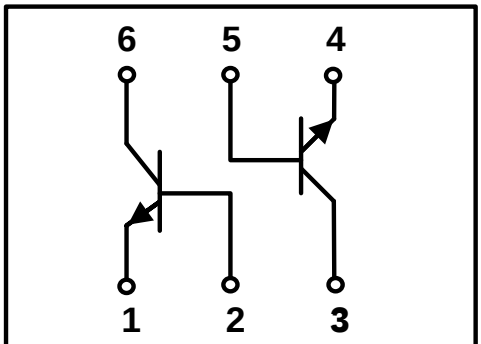


SOT-363-6L

Mechanical Characteristics

- SOT-363-6L Package
- Marking : Making Code
- RoHS Compliant

Schematic & PIN Configuration



SOT-363-6L(Top View)

Absolute Maximum Rating

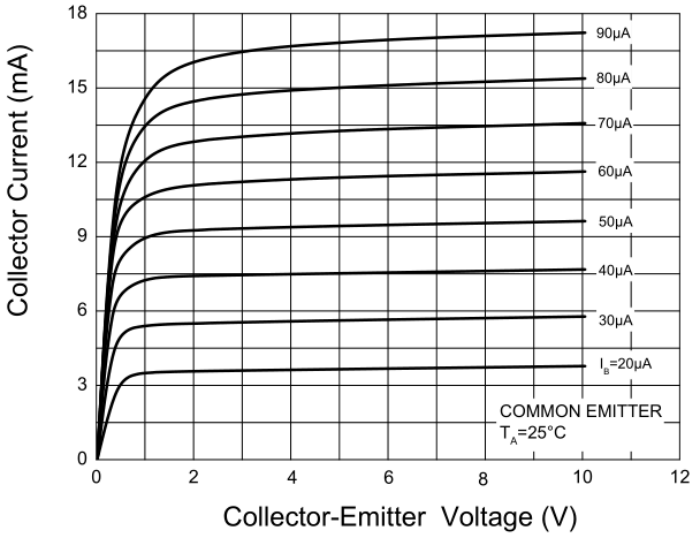
Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	180	V
Collector Emitter Voltage	V_{CEO}	160	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current Continuous	I_C	0.2	A
Collector Power Dissipation	P_C	0.2	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ 150	°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	°C/W

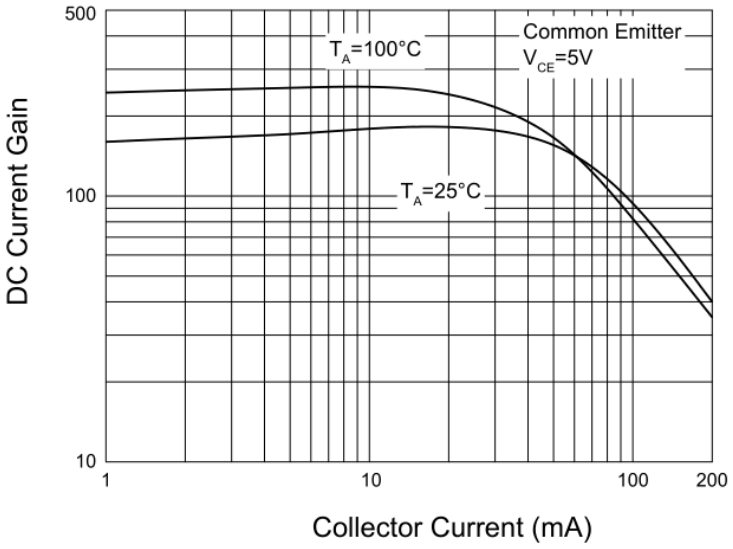
©2021 WAYON Corporation

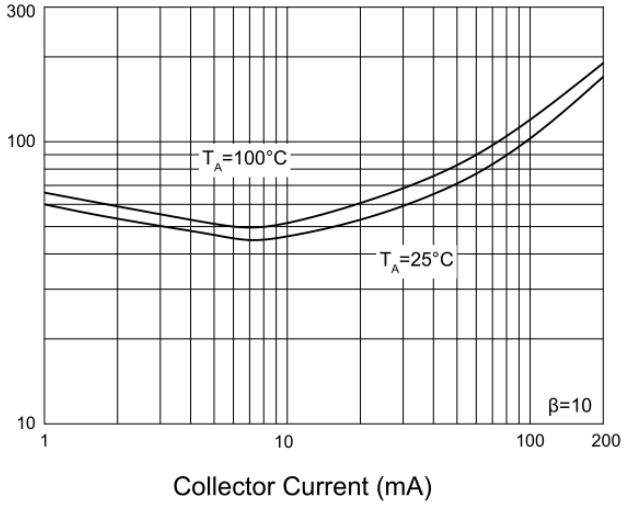
Electrical Characteristics (Tamb=25°C unless otherwise noted)

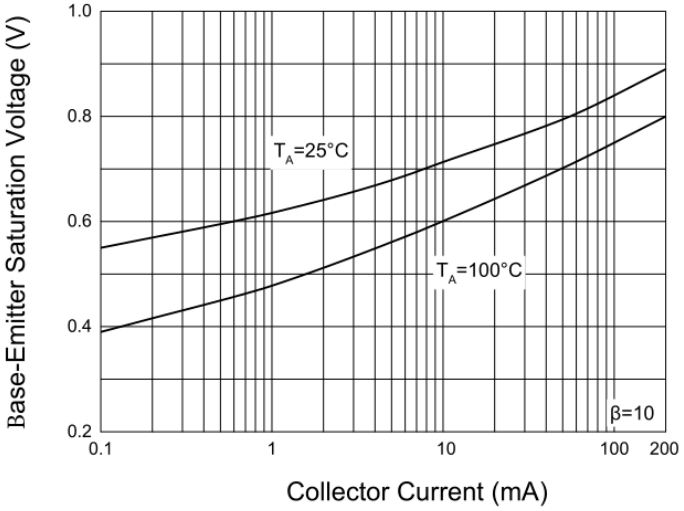
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 100μA, I_E = 0	180	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 1mA, I_B = 0	160	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 10μA, I_C = 0	6	-	-	V
Collector Cut-off Current	I_{CBO}	V_{CB} = 120V, I_E = 0	-	-	50	nA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 4V, I_C = 0	-	-	50	nA
DC Current Gain	$h_{FE(1)}$	V_{CE} = 5V, I_C = 1mA	80	-	-	-
	$h_{FE(2)}$	V_{CE} = 5V, I_C = 10mA	100	-	300	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 10mA, I_B = 1mA	-	-	0.15	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 10mA, I_B = 1mA	-	-	1	V
Transition Frequency	f_T	V_{CE}=20V, I_C=10mA, f=100MHz	100	-	300	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 5V, I_E = 0, f=1MHz	-	-	6	pF
Noise Figure	NF	V_{CE}=5V,I_C=0.2mA,f=1kHz,R_S=1KΩ	-	-	8	dB

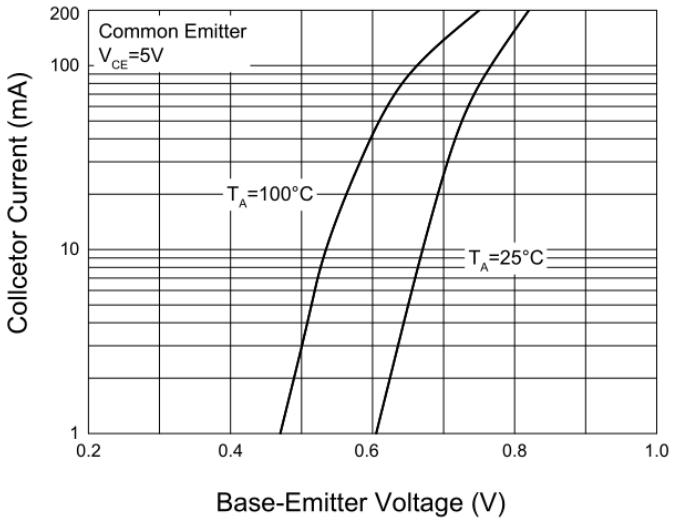
Typical Characteristics

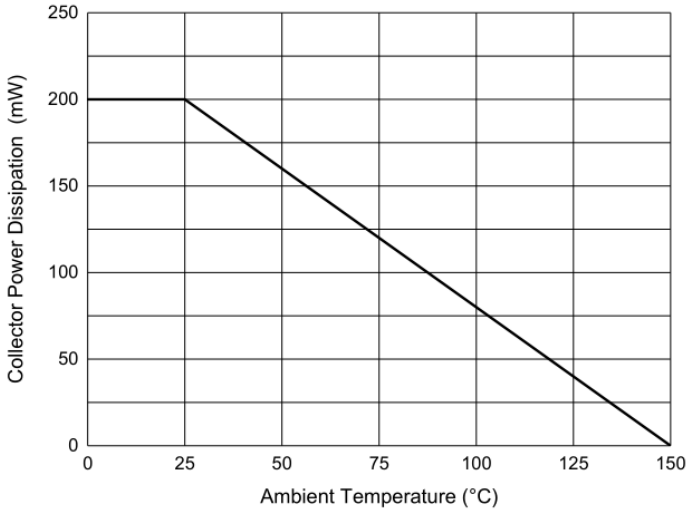





300
100
10
1
10
100
200
T_A=100°C
T_A=25°C
β=10
Collector Current (mA)

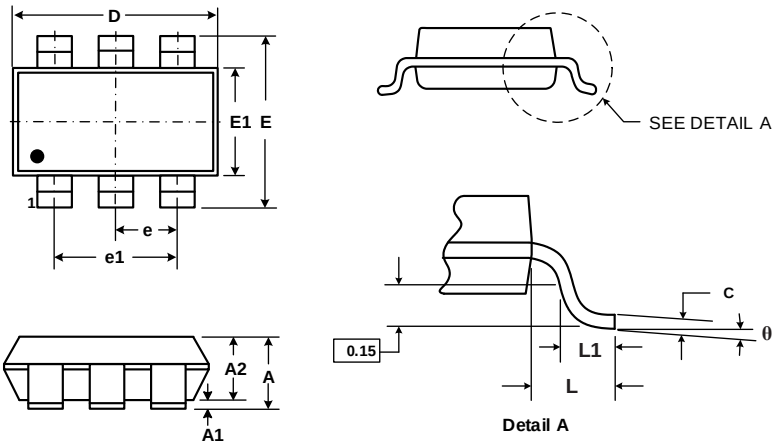

1.0
0.8
0.6
0.4
0.2
0.1
1
10
100
200
Base-Emitter Saturation Voltage (V)
T_A=25°C
T_A=100°C
β=10
Collector Current (mA)

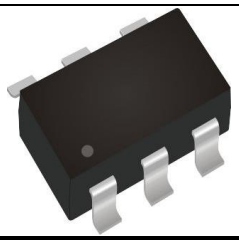

200
100
10
1
0.2
0.4
0.6
0.8
1.0
Common Emitter
V_{CE}=5V
Collcetor Current (mA)
T_A=100°C
T_A=25°C
Base-Emitter Voltage (V)


250
200
150
100
50
0
0
25
50
75
100
125
150
Collector Power Dissipation (mW)
Ambient Temperature (°C)

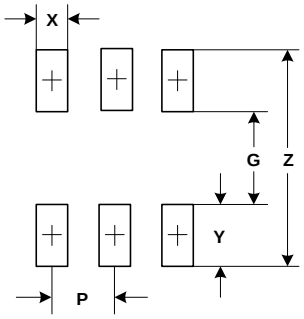
Outline Drawing – SOT-363-6L

PACKAGE OUTLINE





DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.035	0.043	0.900	1.100
A1	0.000	0.004	0.000	0.100
A2	0.035	0.039	0.900	1.000
D	0.079	0.087	2.000	2.200
E1	0.045	0.053	1.150	1.350
E	0.085	0.096	2.150	2.450
e	0.026 TYP		0.650 TYP	
e1	0.047	0.055	1.200	1.400
L	0.021 REF		0.525 REF	
L1	0.010	0.018	0.260	0.460
θ	0°	8°	0°	8°

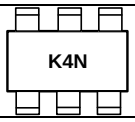


DIMENSIONS		
DIM	INCHES	MILLIMETERS
Z	0.090	2.30
G	0.073	1.85
P	0.020 TYP	0.65 TYP
X	0.008	0.20
Y	0.033	0.85

Notes

1. Dimensioning and tolerances per ANSI Y14.5M, 1985.
2. Controlling Dimension: Inches
3. Dimensions are exclusive of mold flash and metal burrs.

Marking Codes

Part Number	WT5551DW
Marking Code	

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.