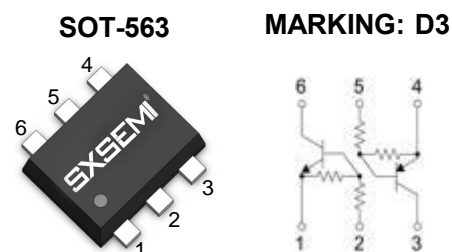


FEATURES

- | DTA114E and DTC114E transistors are built-in a package.
- | Transistor elements are independent, eliminating interference.
- | Mounting cost and area can be cut in half.


Absolute maximum ratings(Ta=25°C)

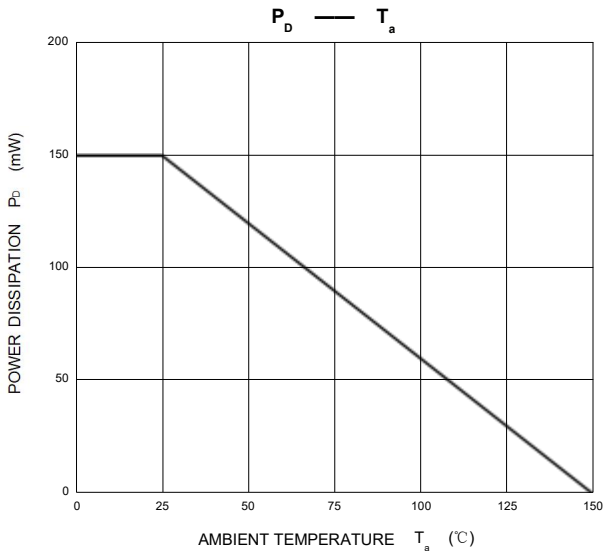
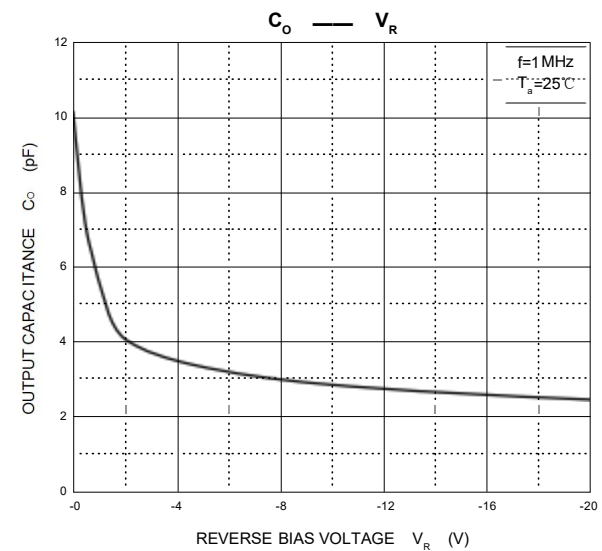
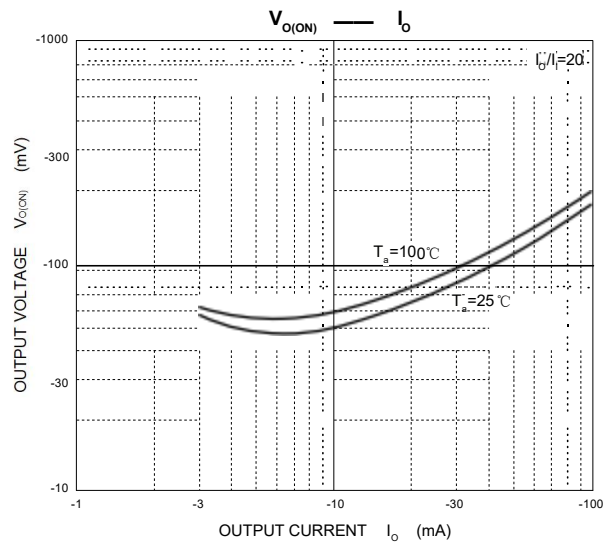
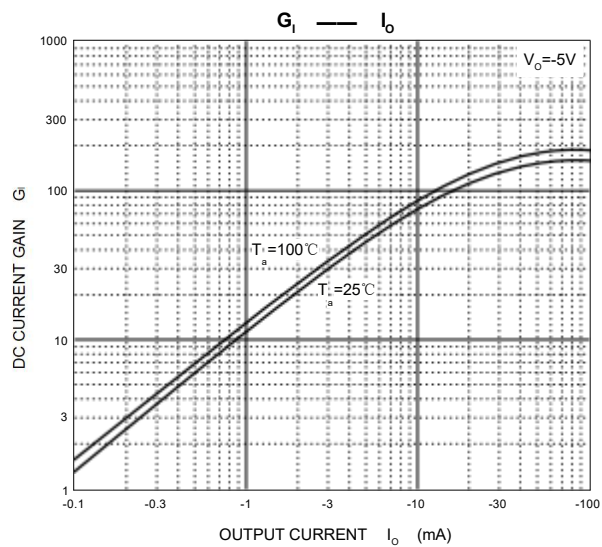
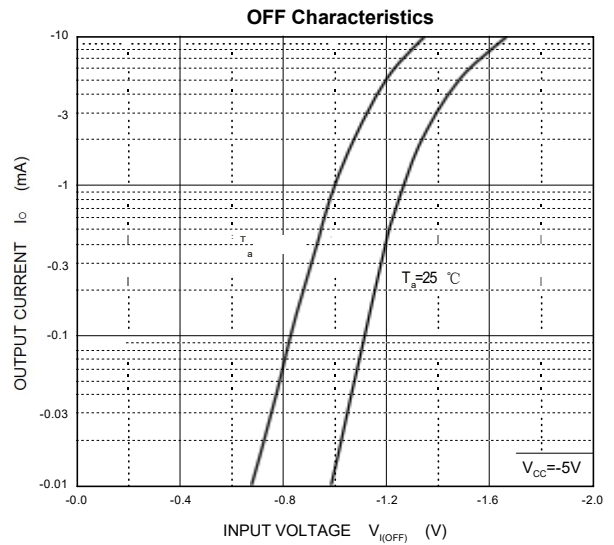
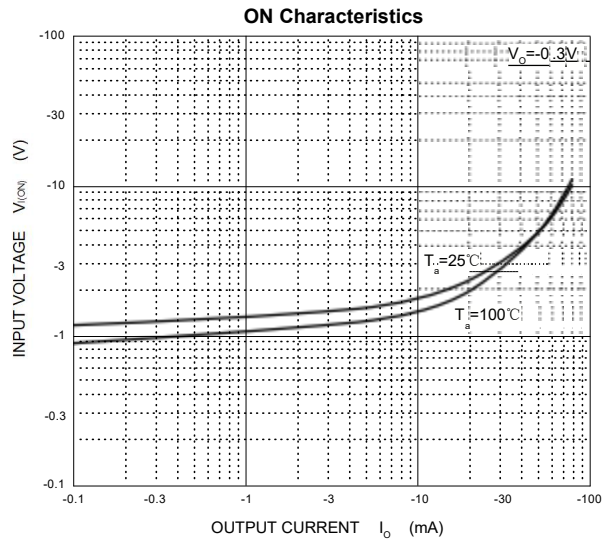
Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	50	V
Input voltage	V_{IN}	-10~40	V
Output current	I_o	50	mA
	$I_{C(MAX)}$	100	
Power dissipation	P_d	150(TOTAL)	mW
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	°C

Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	0.5			V	$V_{CC}=5V, I_o=100\mu A$
	$V_{I(on)}$			3		$V_o=0.3V, I_o=10mA$
Output voltage	$V_{O(on)}$			0.3	V	$I_o/I_i=10mA/0.5mA$
Input current	I_i			0.88	mA	$V_i=5V$
Output current	$I_{O(off)}$			0.5	μA	$V_{CC}=50V, V_i=0$
DC current gain	G_I	30				$V_o=5V, I_o=5mA$
Input resistance	R_1	7	10	13	K Ω	
Resistance ratio	R_2/R_1	0.8	1	1.2		
Transition frequency	f_T		250		MHz	$V_{CE}=10V, I_E=-5mA, f=100MHz$

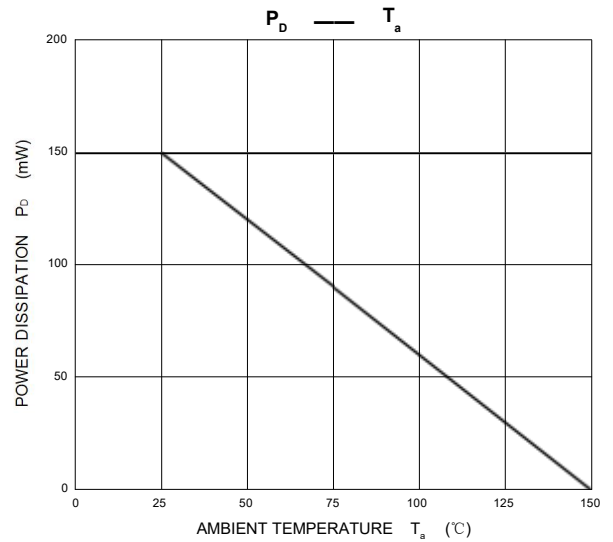
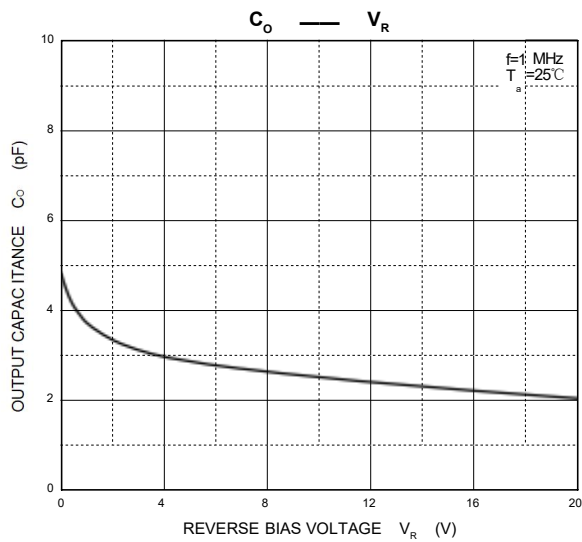
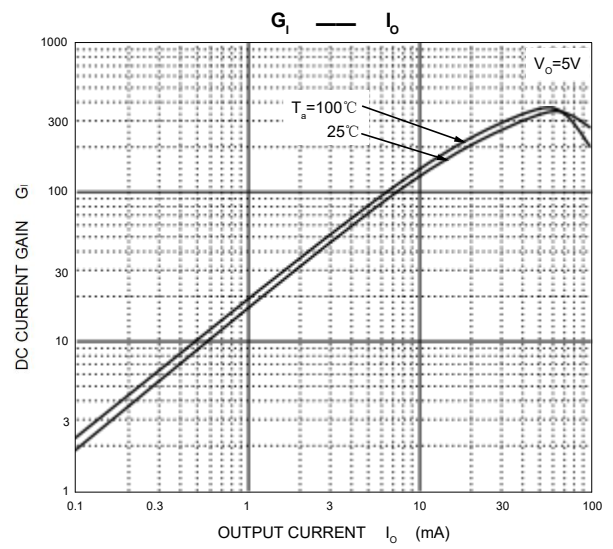
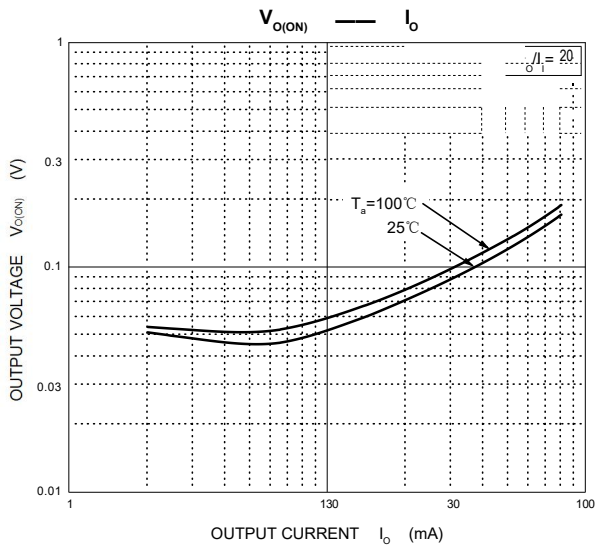
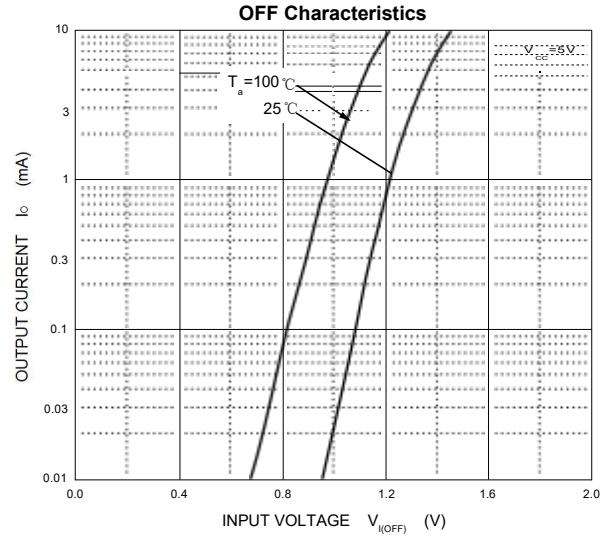
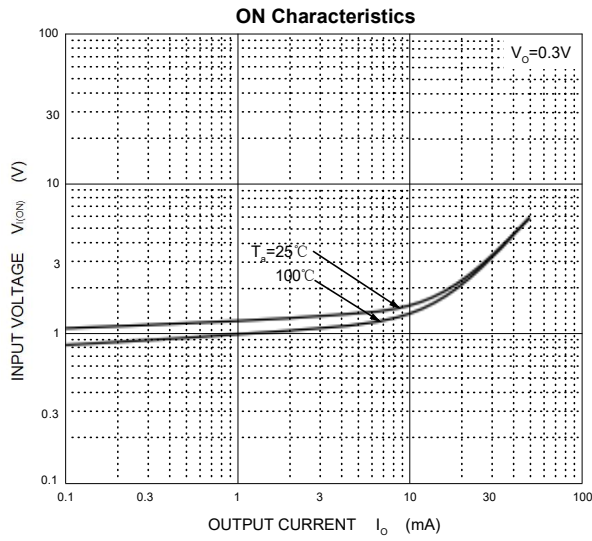
Typical Characteristics

DTA114E(PNP)

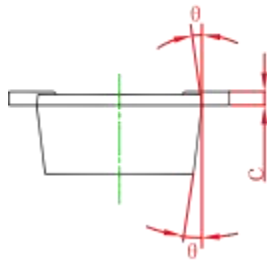
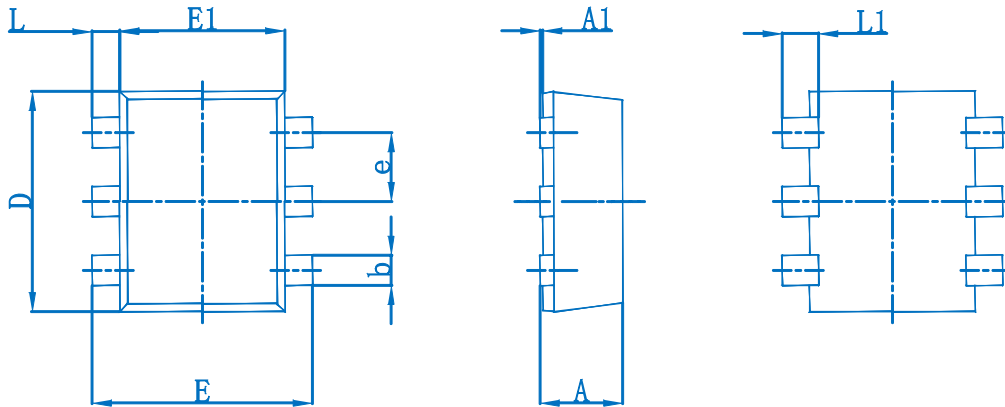


Typical Characteristics

DTC114E(NPN)

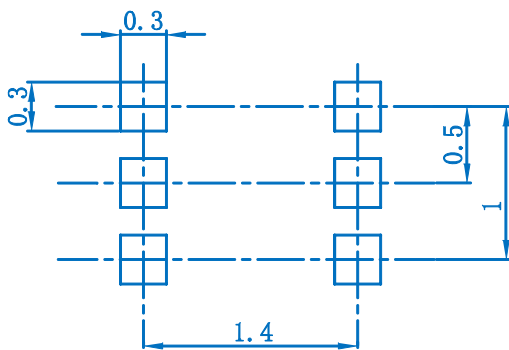


SOT-563 Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min.	Max.	Min.	Max.
A	0.525	0.600	0.021	0.024
A1	0.000	0.050	0.000	0.002
e	0.450	0.550	0.018	0.022
c	0.090	0.160	0.004	0.006
D	1.500	1.700	0.059	0.067
b	0.170	0.270	0.007	0.011
E1	1.100	1.300	0.043	0.051
E	1.500	1.700	0.059	0.067
L	0.100	0.300	0.004	0.012
L1	0.200	0.400	0.008	0.016
θ	10 ⁰ REF.		10 ⁰ REF.	

SOT-563 Suggested Pad Layout



- Note:**
1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05 mm.
 3. The pad layout is for reference purposes only.