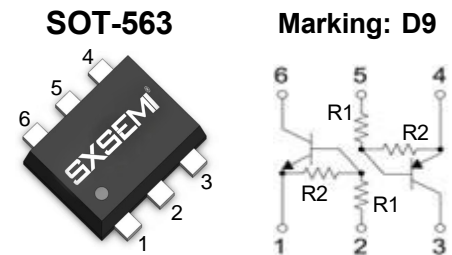


FEATURES

Two DTA114Y and DTC114Y transistors are built-in a package


DTr1 Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	50	V
Input voltage	V_{IN}	-6~+40	V
Output current	I_o	70	mA
	$I_{C(MAX)}$	100	
Power dissipation	P_d	150	mW
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	$^\circ\text{C}$

Electrical characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Input voltage	$V_{I(off)}$	0.3			V	$V_{CC}=5V, I_o=100\mu\text{A}$
	$V_{I(on)}$			1.4		$V_o=0.3V, I_o=1\text{mA}$
Output voltage	$V_{O(on)}$		0.1	0.3	V	$I_o=5\text{mA}, I_i=0.25\text{mA}$
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	68				$V_o=5V, I_o=5\text{mA}$
Input resistance	R_1	7	10	13	K Ω	
Resistance ratio	R_2/R_1	3.7	4.7	5.7		
Transition frequency	f_T		250		MHz	$V_o=10V, I_o=5\text{mA}, f=100\text{MHz}$

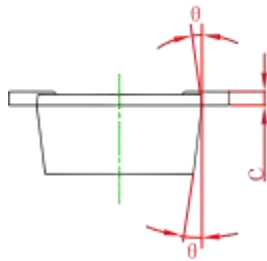
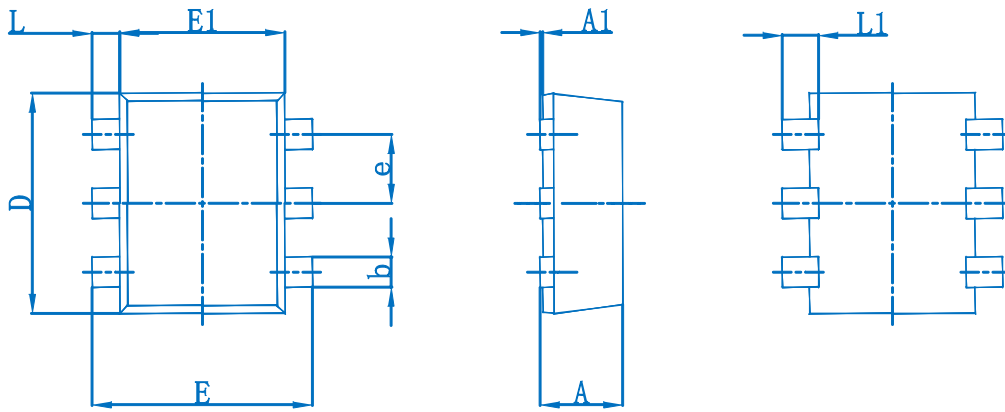
DTr2 Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	-50	V
Input voltage	V_{IN}	-40~+6	V
Output current	I_o	-70	mA
	$I_{C(MAX)}$	-100	
Power dissipation	P_d	150	mW
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	$^\circ\text{C}$

Electrical characteristics ($T_a=25^\circ\text{C}$)

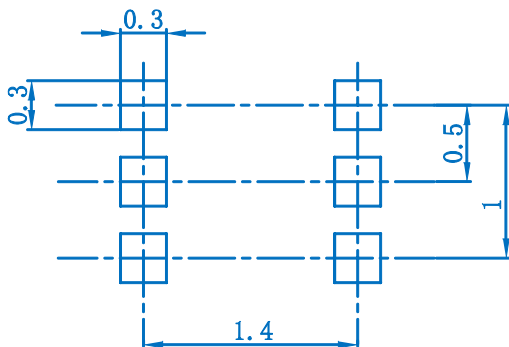
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Input voltage	$V_{I(off)}$	-0.3			V	$V_{CC}=-5V, I_o=-100\mu\text{A}$
	$V_{I(on)}$			-1.4		$V_o=-0.3V, I_o=-1\text{mA}$
Output voltage	$V_{O(on)}$		-0.1	-0.3	V	$I_o=-5\text{mA}, I_i=-0.25\text{mA}$
Input current	I_i			-0.88	mA	$V_i=-5V$
Output current	$I_{O(off)}$			-0.5	μA	$V_{CC}=-50V, V_i=0$
DC current gain	G_I	68				$V_o=-5V, I_o=-5\text{mA}$
Input resistance	R_1	7	10	13	K Ω	
Resistance ratio	R_2/R_1	3.7	4.7	5.7		
Transition frequency	f_T		250		MHz	$V_o=-10V, I_o=-5\text{mA}, f=100\text{MHz}$

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
r	10 ⁰ REF.		10 ⁰ REF.	

SOT-563 Suggested Pad Layout



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