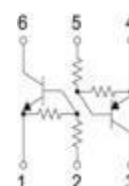
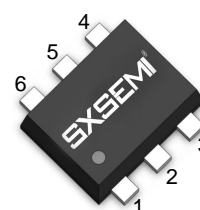


FEATURES

- | Both the DTC123J chip and DTA123J chip in a package.
- | Mounting possible with SOT-563 automatic mounting machines.
- | Transistor elements are independent, eliminating interference.
- | Mounting cost and area be cut in half.

SOT-563
Marking: D10

T_{R1} Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	50	V
Input voltage	V _{IN}	-5~12	V
Output current	I _o	100	mA
	I _{C(MAX)}	100	
Power dissipation	P _d	150	mW
Operation Junction and Storage Temperature Range	T _J , T _{stg}	-55~+150	°C

T_{R1} 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 =100μA
	V _{I(on)}			1.1		V _O =0.3V, I _o =5mA
Output voltage	V _{O(on)}		0.1	0.3	V	I _o /I _i =5mA/0.25mA
Input current	I _i			3.6	mA	V _I =5V
Output current	I _{O(off)}			0.5	μA	V _{CC} =50V, V _I =0
DC current gain	G _I	80				V _O =5V, I _o =10mA
Input resistance	R ₁	1.54	2.2	2.86	KΩ	-
Resistance ratio	R ₂ /R ₁	17	21	26		-
Transition frequency	f _T		250		MHz	V _{CE} =10V, I _E =5mA, f=100MHz

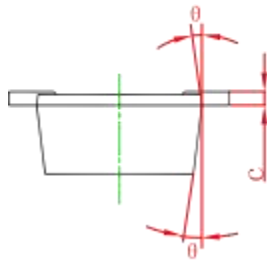
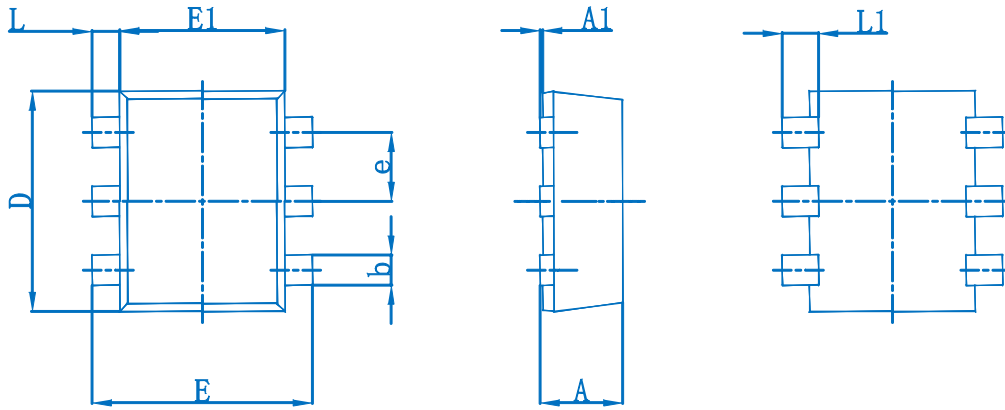
T_{R2} Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V _{CC}	-50	V
Input voltage	V _{IN}	-12~5	V
Output current	I _o	-100	mA
	I _{C(MAX)}	-100	
Power dissipation	Pd	150	mW
Operation Junction and Storage Temperature Range	T _J , T _{stg}	-55~+150	°C

T_{R2} Electrical characteristics (Ta=25°C)

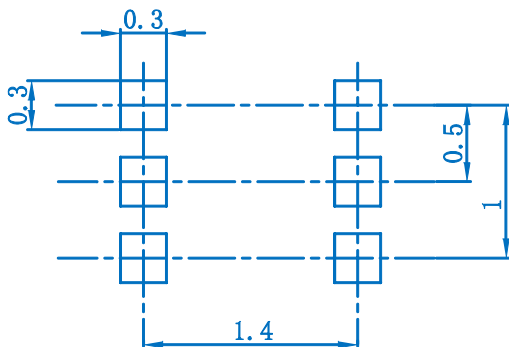
Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Input voltage	V _{I(off)}	-0.5			V	V _{CC} =-5V, I _o =-100μA
	V _{I(on)}			-1.1		V _O =-0.3V, I _o =-5mA
Output voltage	V _{O(on)}		-0.1	-0.3	V	I _o /I _I =-5mA/-0.25mA
Input current	I _I			-3.6	mA	V _I =-5V
Output current	I _{O(off)}			-0.5	μA	V _{CC} =-50V, V _I =0
DC current gain	G _I	80				V _O =-5V, I _o =-10mA
Input resistance	R ₁	1.54	2.2	2.86	KΩ	-
Resistance ratio	R ₂ /R ₁	17	21	26		-
Transition frequency	f _T		250		MHz	V _{CE} =-10V, I _E =-5mA, f=100MHz

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.