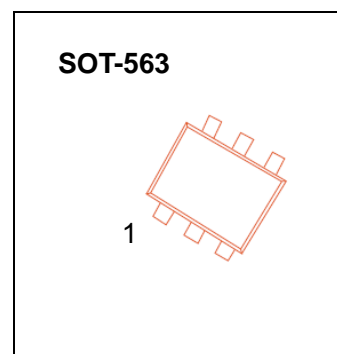
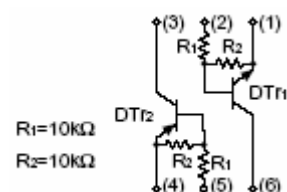


DIGITAL TRANSISTOR (NPN+PNP)

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.

External circuit



MARKING: D3

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

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
Junction temperature	T_j	150	
Storage temperature	T_{stg}	-55~150	

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

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	$V_{CE} = 10V, I_E = -5mA, f = 100MHz$