

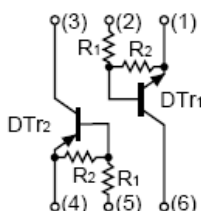
General purpose transistors (dual transistors)

FEATURES

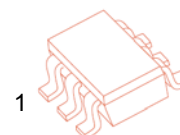
- Both the DTA143Z chip and DTC143Z chip in a package
- Mounting possible with SOT-363 automatic mounting machines.
- Transistor elements are independent, eliminating interference.
- Mounting cost and area be cut in half.

Marking: D22

Equivalent circuit



SOT-363



DTr1 DTC143Z

Absolute maximum ratings(Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	50	V
Input voltage	V_{IN}	-5~+30	V
Output current	I_O	100	mA
	$I_{C(MAX)}$	100	
Power dissipation	P_d	150	mW
Junction temperature	T_j	150	°C
Storage temperature	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	$V_{CC}=5V, I_O=100\mu A$
	$V_{I(on)}$	1.3				$V_O=0.3V, I_O=5mA$
Output voltage	$V_{O(on)}$		0.1	0.3	V	$I_O/I_I=5mA/0.25mA$
Input current	I_I			1.8	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	3.29	4.7	6.11	K Ω	-
Resistance ratio	R_2/R_1	8	10	12		-
Transition frequency	f_T		250		MHz	$V_{CE}=10V, I_E=-5mA, f=100MHz$

DTr2 DTA143Z
Absolute maximum ratings(Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	-50	V
Input voltage	V_{IN}	-30~+5	V
Output current	I_o	-100	mA
	$I_{C(MAX)}$	-100	
Power dissipation	P_d	150	mW
Junction temperature	T_j	150	°C
Storage temperature	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	$V_{CC}=-5V, I_o=-100\mu A$
	$V_{I(on)}$	-1.3				$V_o=-0.3V, I_o=-5mA$
Output voltage	$V_{O(on)}$		-0.1	-0.3	V	$I_o/I_i=-5mA/-0.25mA$
Input current	I_i			-1.8	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	3.29	4.7	6.11	K Ω	-
Resistance ratio	R_2/R_1	8	10	12		-
Transition frequency	f_T		250		MHz	$V_{CE}=-10V, I_E=5mA, f=100MHz$