



DTA143EDW

SOT-363

Digital Transistors (Built-in Resistors)

Dual PNP Bias Resistor Transistors

Features

- Mounting possible with SOT-363 automatic mounting machines
- Transistor elements are independent, eliminating interference
- Mounting cost and area be cut in half

Schematic & Pin configuration

Simplified outline	Schematic & Pin configuration

Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$, unless otherwise specified)

Parameter	Symbol	Value	Unit
Supply voltage	V_{CC}	-50	V
Input voltage	V_{IN}	-30~+10	V
Output current	I_O	-100	mA
	I_{CM}	-200	
Power Dissipation	P_C	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-50 ~ +150	°C

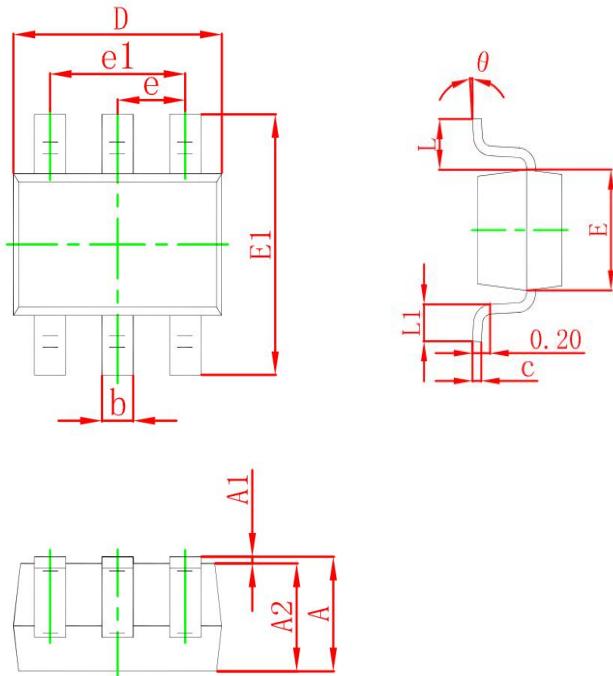
Electrical Characteristics ($T_A = 25^\circ\text{C}$, unless otherwise specified)

Characteristics	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	$V_O=-0.3V, I_O=-20mA$
Output voltage	$V_{O(on)}$	--	--	-0.3	V	$I_O/I_I=-10mA/-0.5mA$
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	30	--	--		$V_O=-5V, I_O=-10mA$
Input resistance	R_I	3.3	4.7	6.1	KΩ	--
Resistance ratio	R_2/R_1	0.8	1.0	1.2	--	--
Transition frequency	f_T	--	250	--	MHz	$V_{CE}=-10V, I_E=5mA, f=100MHz$



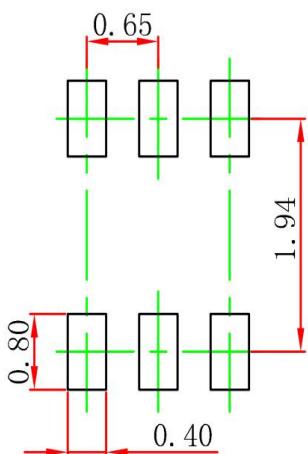
Package Outline Dimensions

SOT-363



Symbol	Dimensions (mm)	
	Min	Max
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.15	0.35
c	0.08	0.15
D	2.00	2.20
E1	2.15	2.41
E	1.15	1.35
e	0.650TYP	
e1	1.20	1.40
L	0.26	0.46
L1	0.525REF	
o	0°	8°

Suggested Pad Layout (mm)



Note:

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