

SOT-363



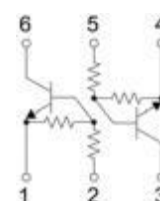
FEATURES

- | Two DTC143Z chips in a package
- | 100 mA output current capability
- | Reduces component count

APPLICATIONS

- | Low current peripheral driver
- | Control of IC inputs
- | Replaces general-purpose transistors in digital applications

MARKING:H13



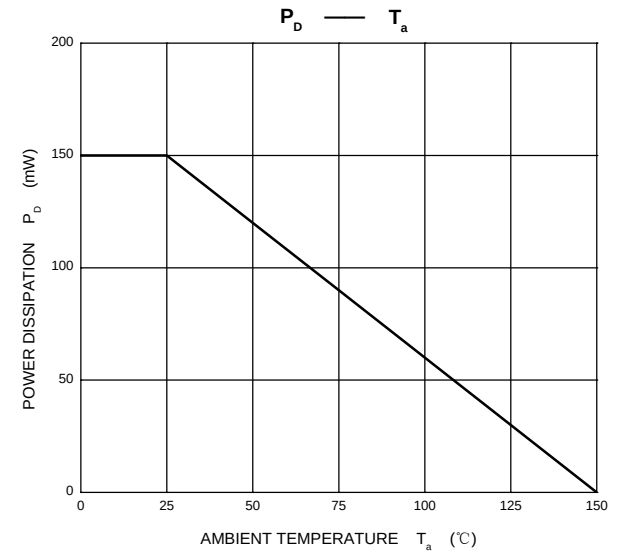
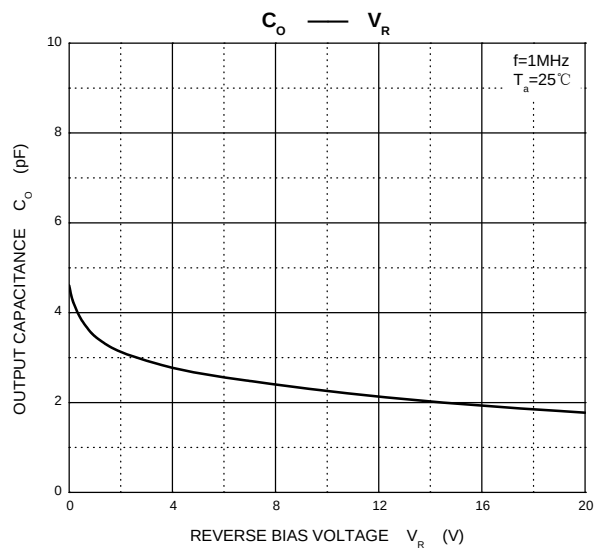
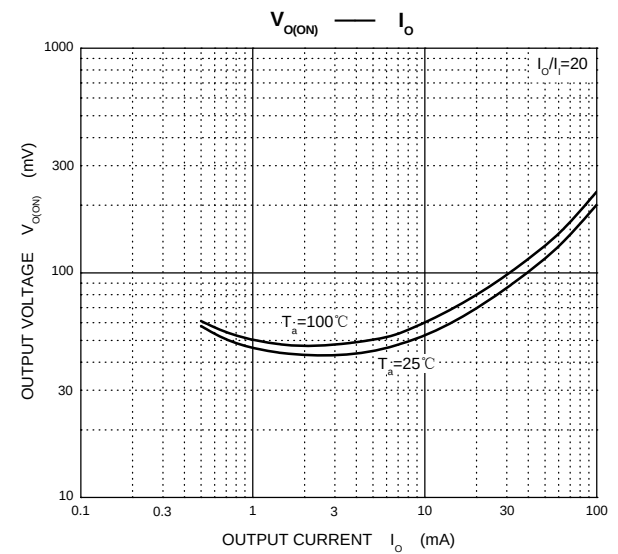
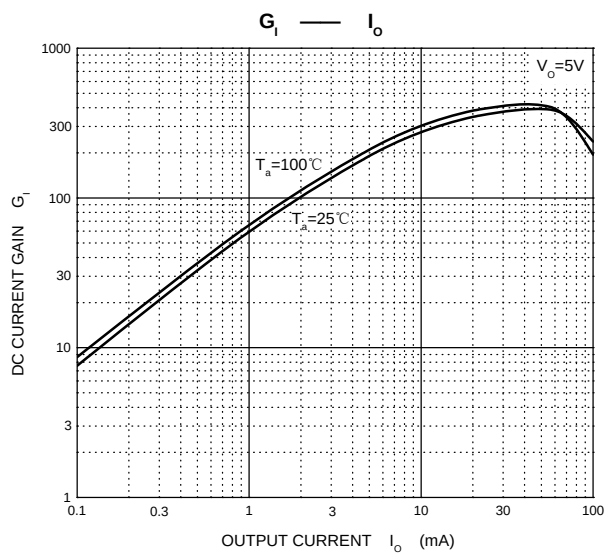
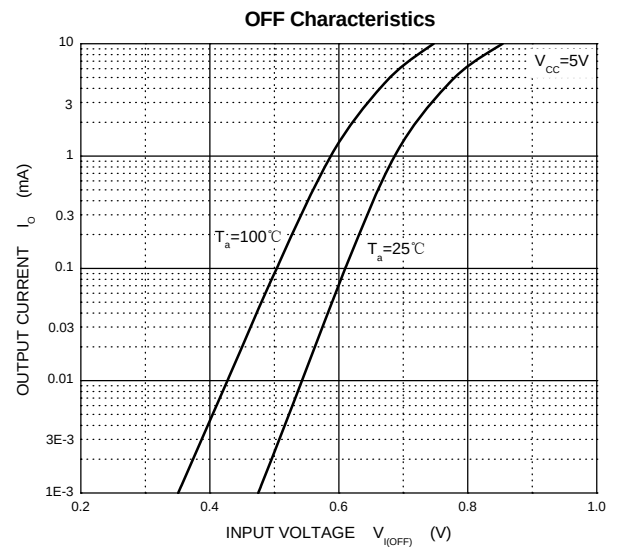
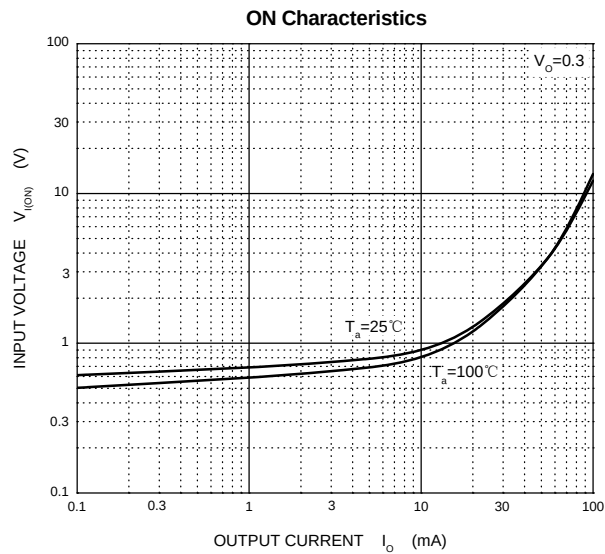
MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{cc}	Supply Voltage	50	V
V _i	Input Voltage	-5~+30	V
I _o	Output Current	100	mA
P _D	Total Power Dissipation	150	mW
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

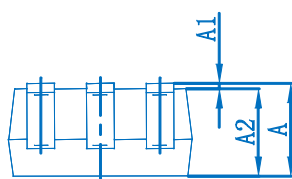
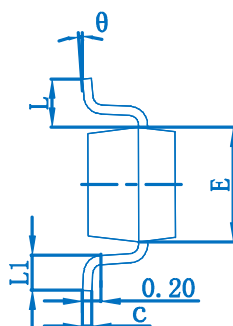
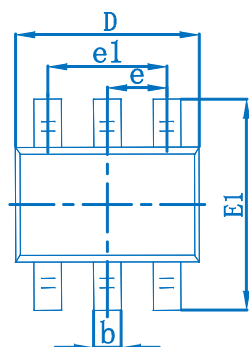
ELECTRICAL CHARACTERISTICS PER DEVICE(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Input turn-on voltage	V _{i(on)}	V _o =0.3V, I _o =5mA			1.3	V
Input cut-off voltage	V _{i(off)}	V _{cc} =5V, I _o =100μA	0.5			V
Output voltage	V _{O(on)}	I _o =5mA, I _i =0.25mA			0.3	V
Input cut-off current	I _i	V _i =5V			1.8	mA
Output cut-off current	I _{O(off)}	V _{cc} =50V, V _i =0			0.5	μA
DC current gain	G _i	V _o =5V, I _o =10mA	80			
Transition frequency	f _T	V _o =10V, I _o =5mA, f=100MHz		250		MHz
Input resistance	R ₁		3.29	4.7	6.11	kΩ
Resistance ratio	R ₂ /R ₁		8	10	12	

Typical Characteristics

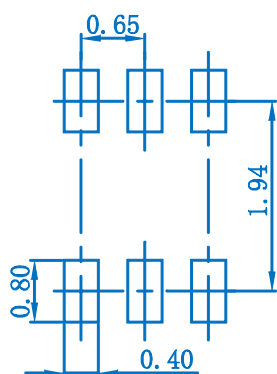


SOT-363 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
theta	0°	8°	0°	8°

SOT-363 Suggested Pad Layout



Note:

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