

Features

- **Pb-Free package is available**
RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors
- The bias resistors consist of thin-film resistors with complete isolation to allow negative biasing of the input. They also have the advantage of almost completely eliminating parasitic effects.
- Only the on/off conditions need to be set for operation, making device design easy

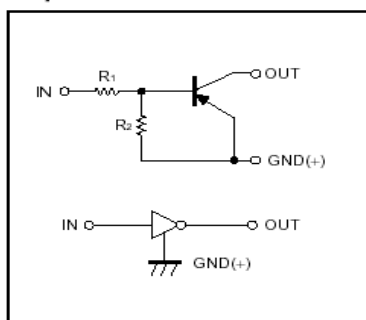
Absolute maximum ratings @ 25°C

Symbol	Parameter	Min	Typ	Max	Unit
V_{CC}	Supply voltage	---	-50	---	V
V_{IN}	Input voltage	-30	---	5.0	V
I_O $I_{C(MAX)}$	Output current	---	-100 -100	---	mA
P_d	Power dissipation	---	200	---	mW
T_j	Junction temperature	---	150	---	°C
T_{stg}	Storage temperature	-55	---	150	°C

Electrical Characteristics @ 25°C

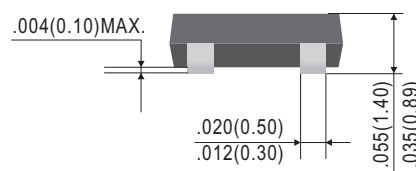
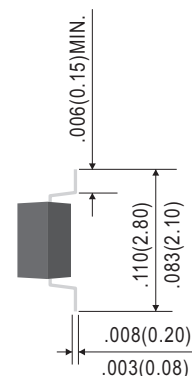
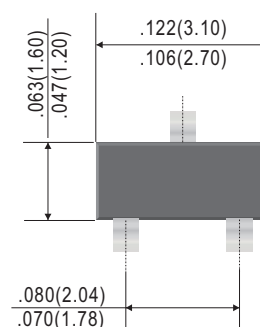
Symbol	Parameter	Min	Typ	Max	Unit
$V_{I(off)}$	Input voltage ($V_{CC}=-5V$, $I_O=-100\mu A$)	-0.5	---	---	V
$V_{I(on)}$	($V_O=0.3V$, $I_O=-5mA$)	---	---	-1.3	V
$V_{O(on)}$	Output voltage ($I_O/I_I=-5mA/-0.25mA$)	---	---	-0.3	V
I_I	Input current ($V_I=-5V$)	---	---	-1.8	mA
$I_{O(off)}$	Output current ($V_{CC}=-50V$, $V_I=0$)	---	---	-0.5	μA
G_I	DC current gain ($V_O=-5V$, $I_O=-10mA$)	80	---	---	
R_1	Input resistance	3.29	4.7	6.11	K Ω
R_2/R_1	Resistance ratio	8.0	10	12	
f_T	Transition frequency ($V_O=-10V$, $I_O=5mA$, $f=100MHz$)	---	250	---	MHz

●Equivalent circuit



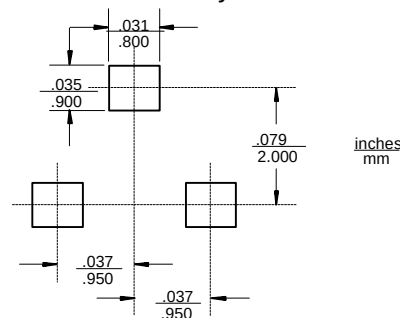
*Marking: E13

SOT-23



Dimensions in inches and (millimeters)

Suggested Solder Pad Layout





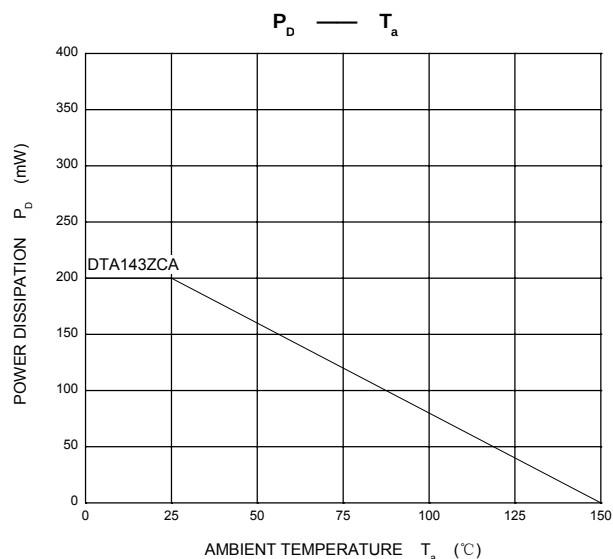
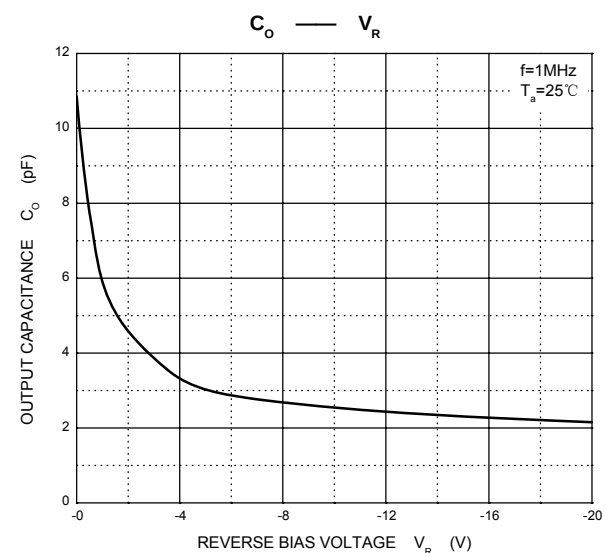
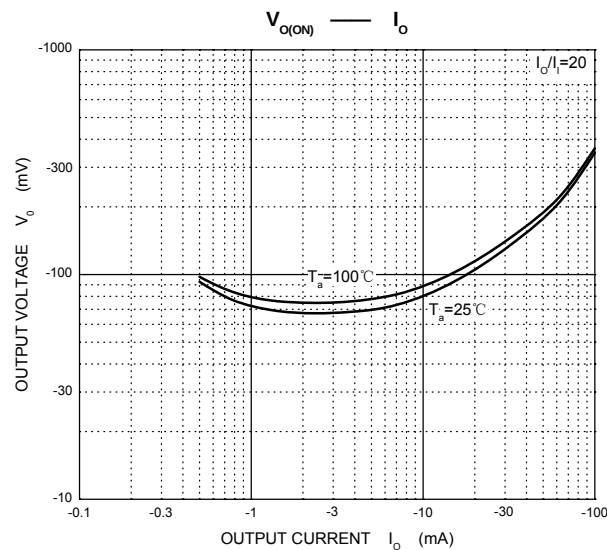
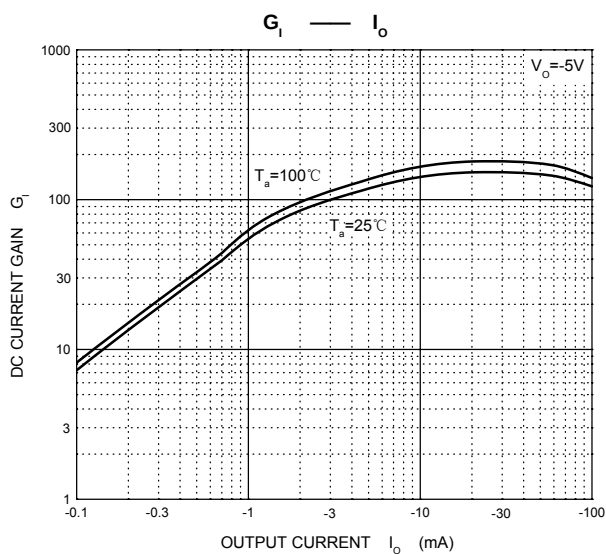
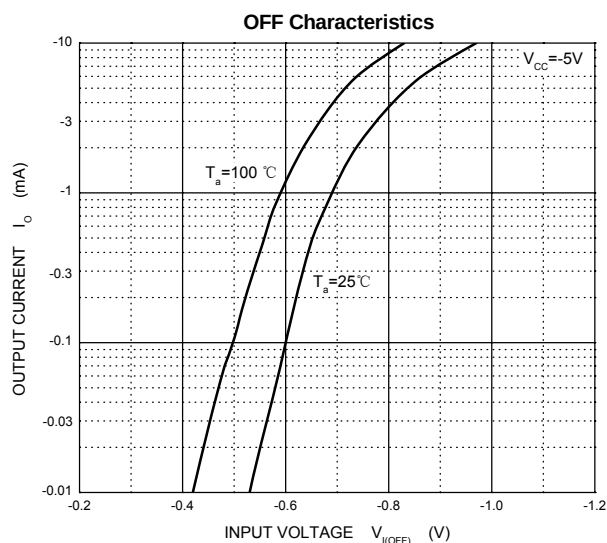
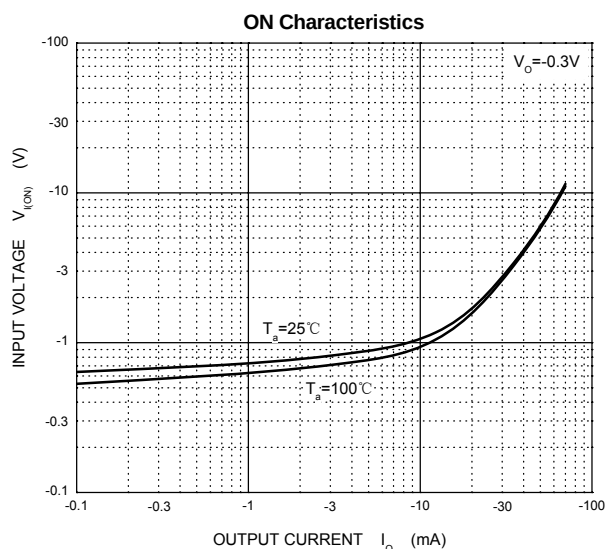
WILLAS



PNP Digital Transistor

DTA143ZCA

Typical Characteristics



Ordering Information:

Device PN	Packing
DTA143ZCA –T ⁽¹⁾ G ⁽²⁾ -WS	Tape& Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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