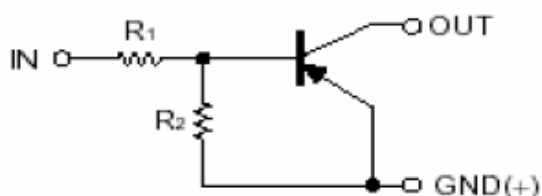


DIGITAL TRANSISTOR (PNP)

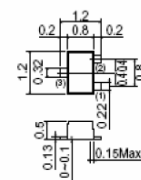
FEATURES

- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see equivalent circuit).
- 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.



Digital Transistor (built-in resistor)

DTA143ZM

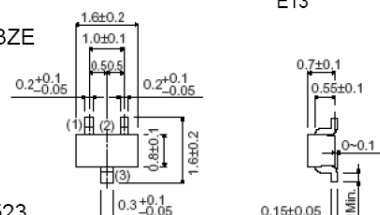


(1) IN
(2) GND
(3) OUT

SOT-523

Abbreviated symbol E13

DTA143ZE

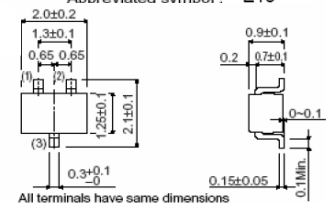


(1) GND
(2) IN
(3) OUT

SOT-523

Abbreviated symbol : E13

DTA143ZUA

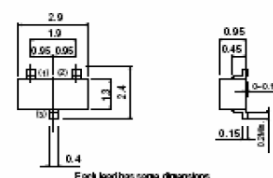


(1) GND
(2) IN
(3) OUT

SOT-323

Abbreviated symbol · 113

DTA143ZCA

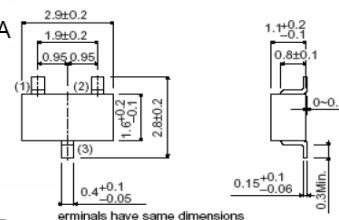


(1) GND
(2) IN
(3) OUT

SOT-23

Each lead has some dimensions

DTA143ZKA



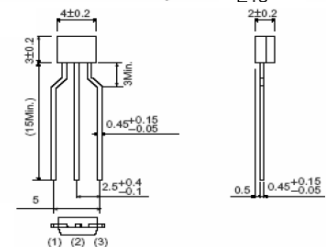
(1) GND
(2) IN
(3) OUT

SOT-23-3L

terminals have same dimensions

Abbreviated symbol :

DTA143ZSA



(1) GND
(2) OUT
(3) IN

TO-92S

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE MAXIMUM RATINGS

Parameters	Symbols	Limits (DTA143Z□)						UNITS
		M	E	UA	KA	CA	SA	
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		200			300	mW
Junction Temperature	T _j	150						℃
Storage Temperature	T _{stg}	-55~150						℃

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Input Voltage	$V_{I(off)}$	$V_{CC}=-5V, I_O=-100\mu A$			-0.5	V
	$V_{I(on)}$	$V_O=-0.3V, I_O=-5mA$	-1.3			
Output Voltage	$V_{O(on)}$	$I_O/I_I=-5mA/-0.25mA$			-0.3	V
Input Current	I_I	$V_I=5V$			-0.18	mA
Output 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			
Input Resistance	R_I		3.29	4.7	6.11	K Ω
Resistance Ratio	R_2/R_1		8	10	12	
Transition Frequency	f_T	$V_{CE}=-10V, I_E=5mA,$ $f=100MHz$		250		MHz