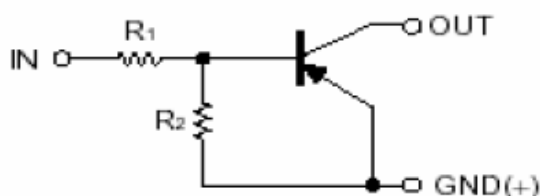


DIGITAL TRANSISTOR (PNP)

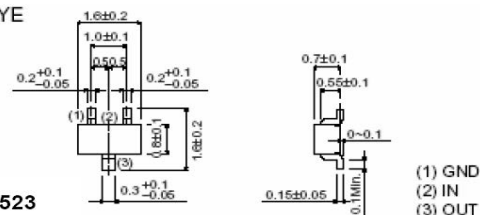
FEATURES

- 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)

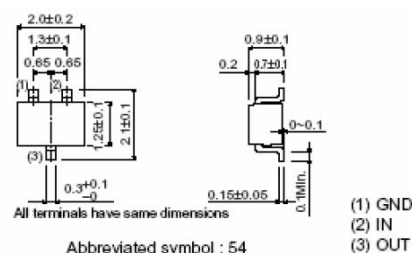
DTA114YE



SOT-523

Abbreviated symbol : 54

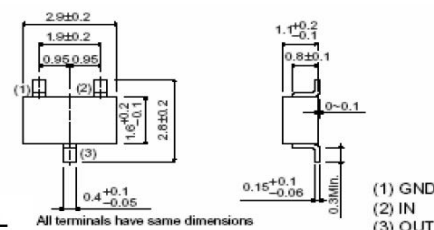
DTA114YUA



SOT-323

Abbreviated symbol : 54

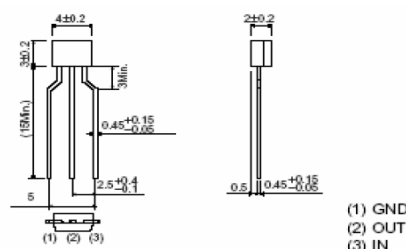
DTA114YKA



SOT-23-3L

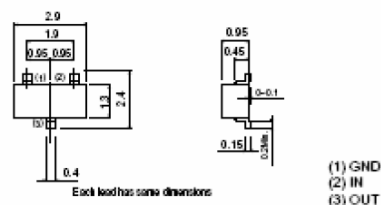
Abbreviated symbol : 54

DTA114YSA



TO-92S

DTA114YCA



SOT-23

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE MAXIMUM RATINGS

Parameters	Symbols	Limits (DTA114Y□)					UNITS
		E	UA	KA	CA	SA	
Supply Voltage	V _{CC}	-50					V
Input Voltage	V _{IN}	-40~+6					V
Output Current	I _O	-70					mA
	I _{C(MAX)}	-100					
Power Dissipation	P _c	150	200			300	mW
Junction Temperature	T _j	150					°C
Storage Temperature	T _{stg}	-55~150					°C

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Input Voltage	$V_{I(off)}$	$V_{CC}=-5V, I_O=-100\mu A$			-0.3	V
	$V_{I(on)}$	$V_O=-0.3V, I_O=-1mA$	-1.4			
Output Voltage	$V_{O(on)}$	$I_O/I_I=-5mA/-0.25mA$			-0.3	V
Input Current	I_I	$V_I=5V$			-0.88	mA
Output Current	$I_{O(off)}$	$V_{CC}=-50V, V_I=0$			-0.5	μA
DC Current Gain	G_I	$V_O=-5V, I_O=-5mA$	68			
Input Resistance	R_1		7	10	13	K Ω
Resistance Ratio	R_2/R_1		3.7	4.7	5.7	
Transition Frequency	f_T	$V_{CE}=-10V, I_E=5mA,$ $f=100MHz$		250		MHz