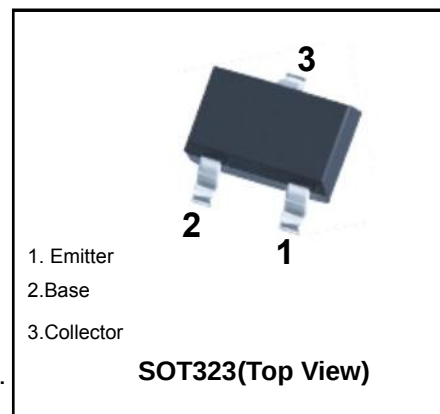


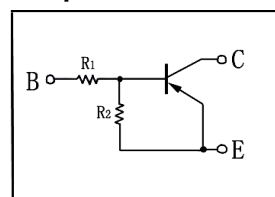
DTA144EUA

Descriptions

- Silicon PNP Digital Transistor in a SOT-323 Plastic Package.
- With built-in bias resistors, simplify circuit design, reduce a quantity of parts and manufacturing process.
- Switching, Inverter circuit, Interface circuit and driver circuit applications.
- Built-In Biasing Resistors, $R_1=R_2=47K\Omega$



Equivalent Circuit



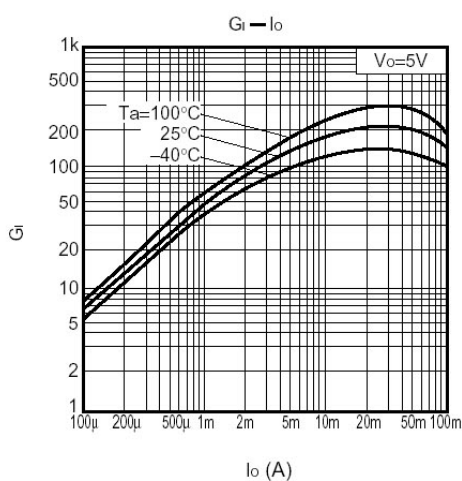
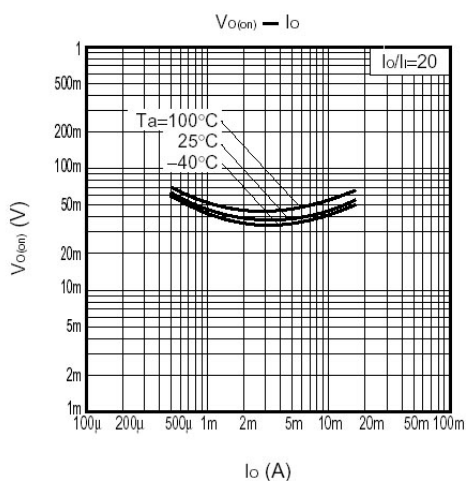
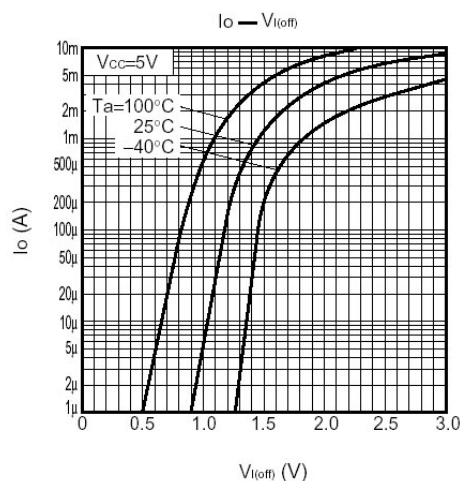
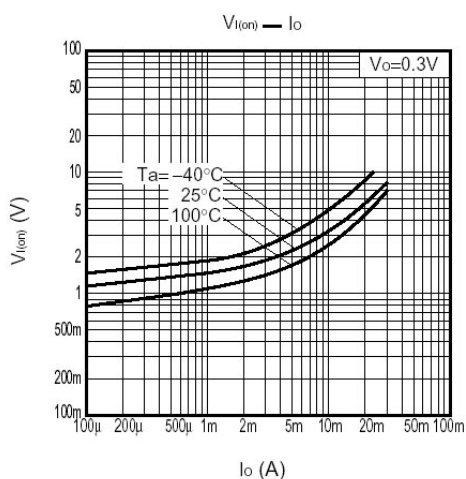
Absolute Maximum Ratings($T_a=25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-40	V
		10	V
Output Current	I_C	-100	mA
	I_O	-30	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}\text{C}$

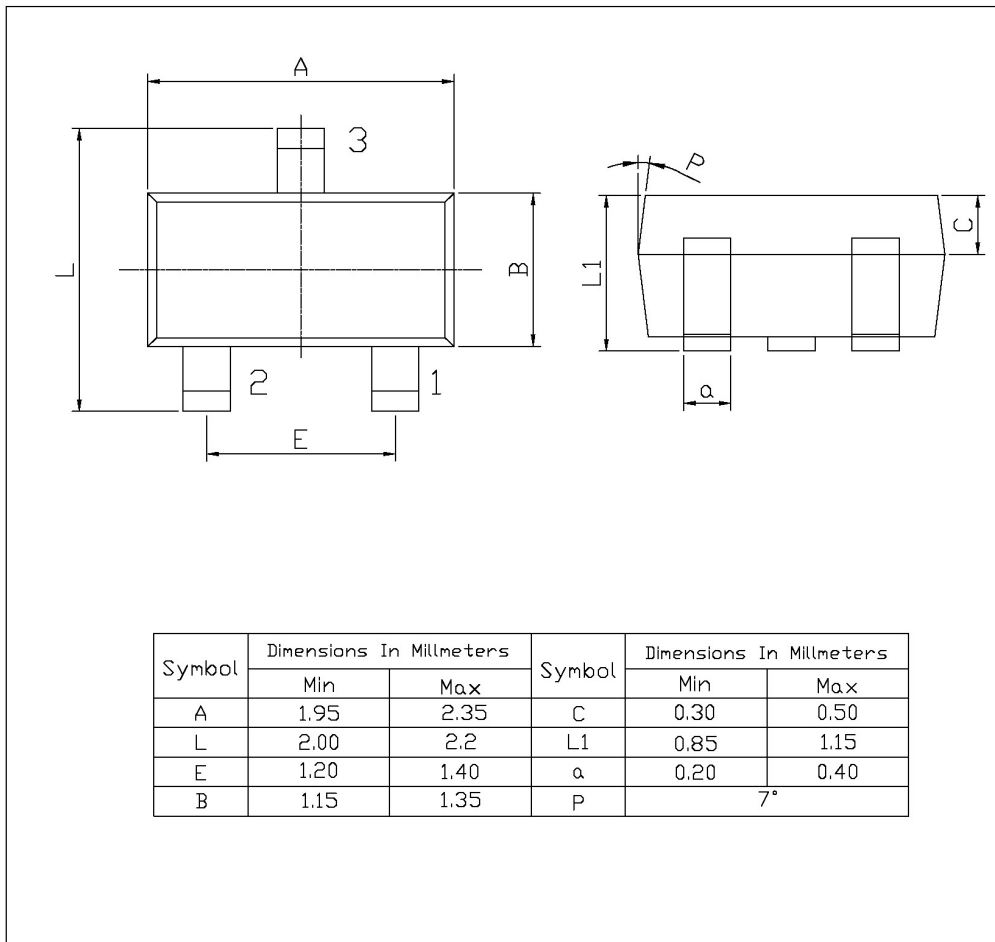
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage	$V_{I(off)}$	$V_{CC}=-5.0V$ $I_O=-100\mu A$			-0.5	V
	$V_{I(on)}$	$V_O=-0.3V$ $I_O=-2.0mA$	-3.0			V
Output Voltage	$V_{O(on)}$	$I_O=-10mA$ $I_I=-0.5mA$		-0.1	-0.3	V
Input Voltage	I_I	$V_I=-5.0V$			-0.18	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=-50V$ $V_I=0V$			-0.5	μA
DC Current Gain	G_I	$V_O=-5.0V$ $I_O=-5.0mA$	68			
Transition Frequency	f_T	$V_{CE}=-10V$ $I_E=5.0mA$ $f=100MHz$		250		MHz
Resistance1	R_1		32.9	47	61.1	K Ω
Resistance Ratio	R_2/R_1		0.8	1.0	1.2	

Electrical Characteristic Curve



Package Dimensions



SOT-323 Suggested Pad Layout

