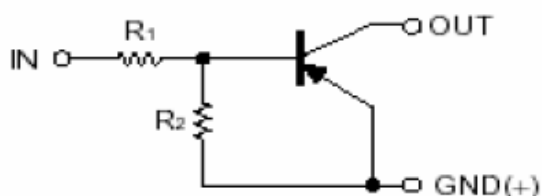


DIGITAL TRANSISTOR (PNP)

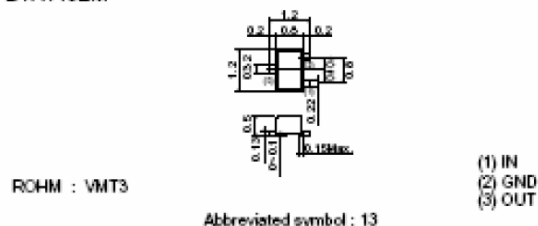
FEATURES

- 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.

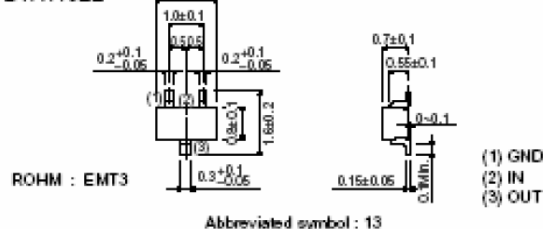


Digital Transistor (built-in resistor)

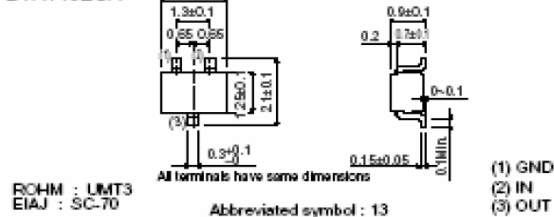
DTA143EM



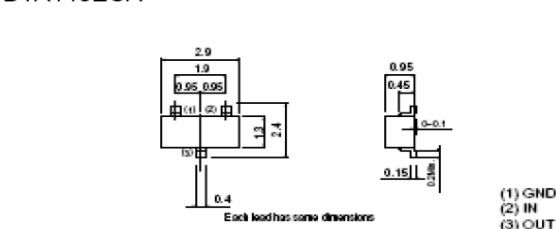
DTA143EE



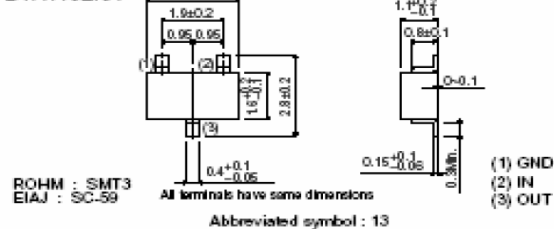
DTA143EUA



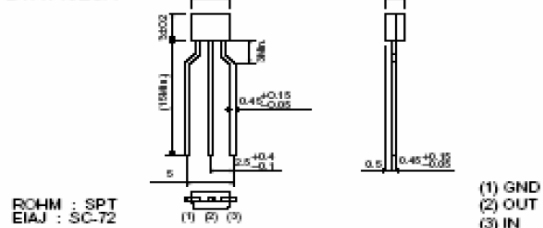
DTA143ECA



DTA143EKA



DTA143ESA



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE MAXIMUM RATINGS

Parameters	Symbols	Limits (DTA143E□)						UNITS
		M	E	UA	KA	CA	SA	
Supply Voltage	V _{CC}	-50						V
Input Voltage	V _{IN}	-30~10						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
	$V_{I(on)}$	$V_O=-0.3V, I_O=-20mA$	-3			
Output Voltage	$V_{O(on)}$	$I_O/I_I=-10mA/-0.5mA$			-0.3	V
Input Current	I_I	$V_I=5V$			-1.8	mA
Output Current	$I_{O(off)}$	$V_{CC}=-50V, V_I=0$			-0.5	μA
DC Current Gain	G_I	$V_O=-5V, I_O=-10mA$	30			
Input Resistance	R_1		3.29	4.7	6.11	K Ω
Resistance Ratio	R_2/R_1		0.8	1	1.2	
Transition Frequency	f_T	$V_{CE}=-10V, I_E=5mA,$ $f=100MHz$		250		MHz