



DTA143X

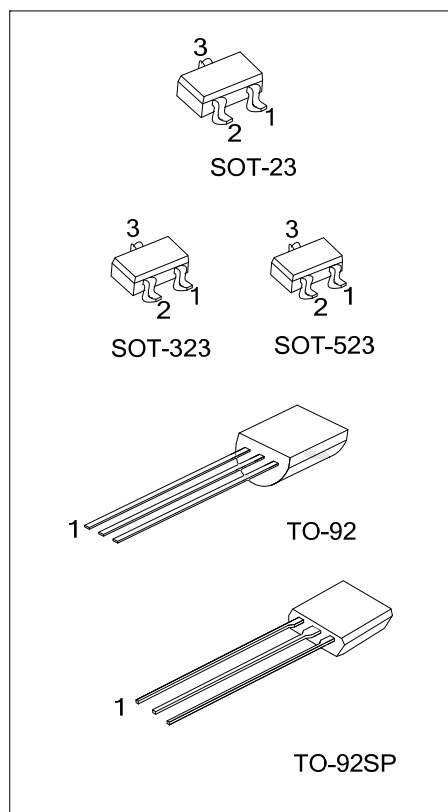
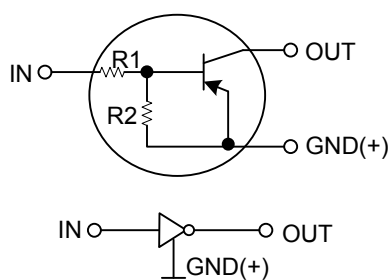
PNP SILICON TRANSISTOR

PNP DIGITAL TRANSISTOR

FEATURES

- * Built-in bias resistors that implies easy ON/OFF applications.
- * The bias resistors are thin-film resistors with complete isolation to allow positive input.

EQUIVALENT CIRCUIT



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
-	DTA143XG-AE3-R	SOT-23	G	I	O	Tape Reel
-	DTA143XG-AL3-R	SOT-323	G	I	O	Tape Reel
-	DTA143XG-AN3-R	SOT-523	G	I	O	Tape Reel
DTA143XL-T92-B	DTA143XG-T92-B	TO-92	G	O	I	Tape Box
DTA143XL-T92-K	DTA143XG-T92-K	TO-92	G	O	I	Bulk
DTA143XL-T9S-K	DTA143XG-T9S-K	TO-92SP	G	O	I	Bulk

Note: Pin Assignment: G: GND I: IN O: OUT

DTA143XG-AE3-R	(1) R: Tape Reel, B: Tape Box, K: Bulk (2) AE3: SOT-23, AL3: SOT-323, AN3: SOT-523, T92: TO-92, T9S: TO-92SP (3) G: Halogen Free and Lead Free, L: Lead Free
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MARKING

SOT-23 / SOT-323 / SOT-523	TO-92	TO-92SP

■ **ABSOLUTE MAXIMUM RATINGS** ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Supply Voltage		V_{CC}	-50	V
Input Voltage		V_I	-20 ~ +7	V
Output Current		I_O	-100	mA
		$I_{C(MAX.)}$	-100	
Power Dissipation	SOT-23/SOT-323/SOT-523	P_D	300	mW
	TO-92		625	
	TO-92SP		550	
Junction Temperature		T_J	150	$^{\circ}\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

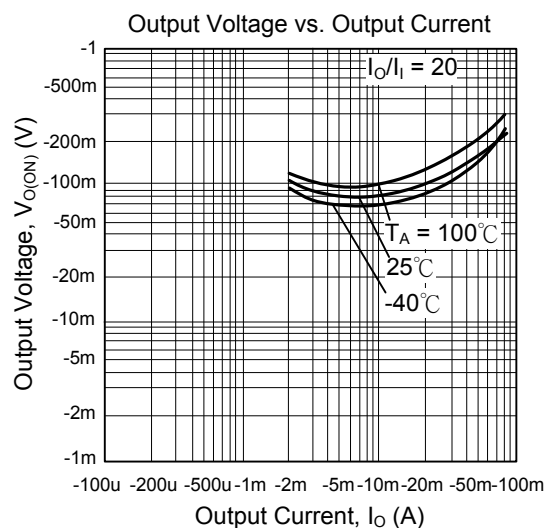
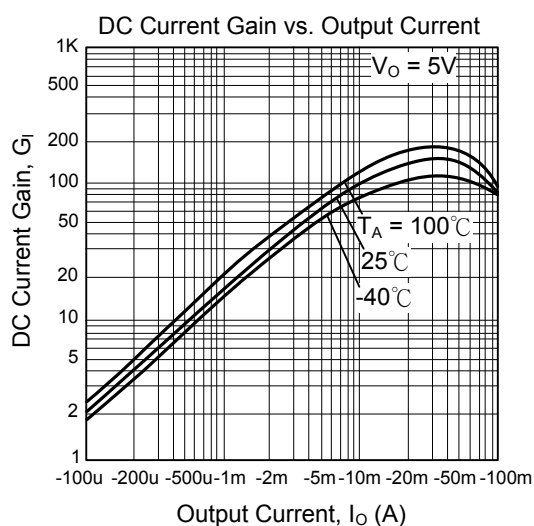
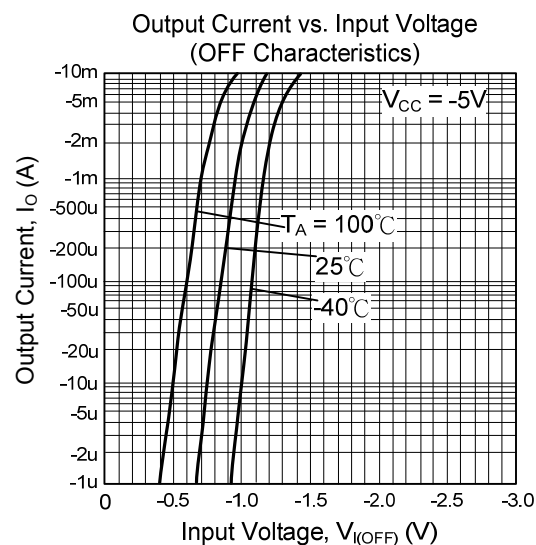
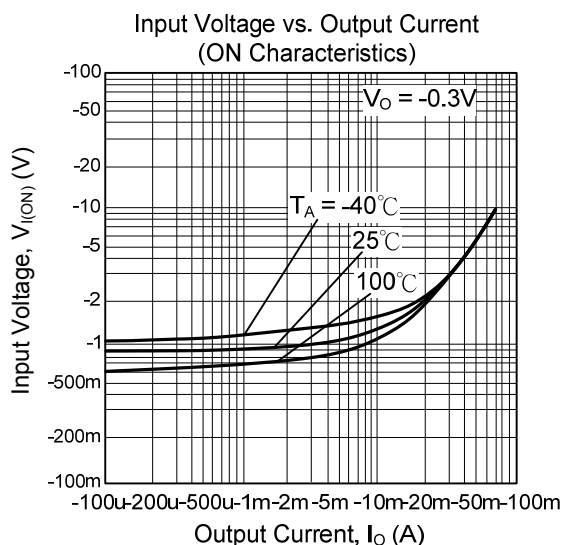
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ **ELECTRICAL CHARACTERISTICS** ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Voltage	$V_{I(OFF)}$	$V_{CC}=-5\text{V}$, $I_O=-100\mu\text{A}$			-0.3	V
	$V_{I(ON)}$	$V_O=-0.3\text{V}$, $I_O=-20\text{mA}$	-2.5			
Output Voltage	$V_{O(ON)}$	$I_O/I_I=-10\text{mA}/-0.5\text{mA}$		-0.1	-0.3	V
Input Current	I_I	$V_I=-5\text{V}$			-1.8	mA
Output Current	$I_{O(OFF)}$	$V_{CC}=-50\text{V}$, $V_I=0\text{V}$			-0.5	μA
DC Current Gain	h_{FE}	$V_O=-5\text{V}$, $I_O=-10\text{mA}$	30			
Input Resistance	R_1		3.29	4.7	6.11	K Ω
Resistance Ratio	R_2/R_1		1.7	2.1	2.6	
Transition Frequency	f_T	$V_{CE}=-10\text{V}$, $I_E=5\text{mA}$, $f=100\text{MHz}$ (Note)		250		MHz

Note: Transition frequency of the device

■ TYPICAL CHARACTERISTICS



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