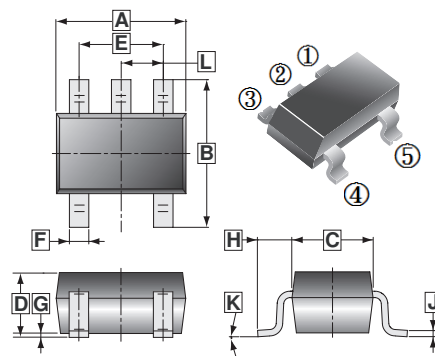


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Built-In biasing resistors
- Two DTA123J transistors are built-in a package
- Emitter(GND)-common type
- Only the on/off conditions need to be set for operation, making the circuit design easy
- The bias resistors consist of thin-film resistors with complete isolation to allow negative biasing of the input. They also have the advantage of completely eliminating parasitic effects
- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors (see inner circuit)

SOT-353



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.00	2.20	G	0.100	REF.
B	2.15	2.45	H	0.525	REF.
C	1.15	1.35	J	0.08	0.15
D	0.90	1.10	K	8°	
E	1.20	1.40	L	0.650 TYP.	
F	0.15	0.35			

MARKING

A5

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-353	3K	7 inch

ORDER INFORMATION

Part Number	Type
UMA5N-C	Lead (Pb)-free and Halogen-free

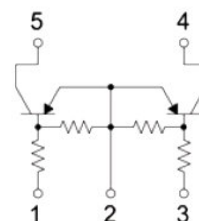
ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Supply Voltage	V _{CC}	-50	V
Input Voltage	V _{IN}	-12 ~ +5	
Output Current	I _O	-100	mA
Power Dissipation	P _D	150	mW
Junction and Storage Temperature	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

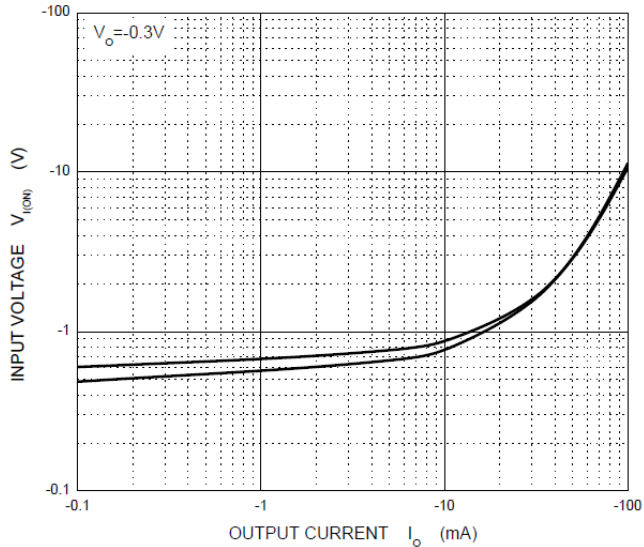
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Input Voltage	V _{I(off)}	-0.5	-	-	V	V _{CC} = -5V, I _O = -100μA
	V _{I(on)}	-	-	-1.1		V _O = -0.3V, I _O = -5mA
Output Voltage	V _{O(on)}	-	-	-0.3		I _O = -5mA, I _I = -0.25mA
Input Current	I _I	-	-	-3.6	mA	V _I = -5V
Output Current	I _{O(off)}	-	-	-0.5	μA	V _{CC} = -50V, V _I =0
DC Current Gain	G _I	80	-	-	V	V _O = -5V, I _O = -10mA
Input Resistance	R ₁	1.54	2.2	2.86	kΩ	
Resistance Ratio	R ₂ /R ₁	17	21	26		
Transition Frequency	f _T	-	250	-	MHz	V _O = -10V, I _O = -5mA, f=100MHz

EQUIVALENT CIRCUIT

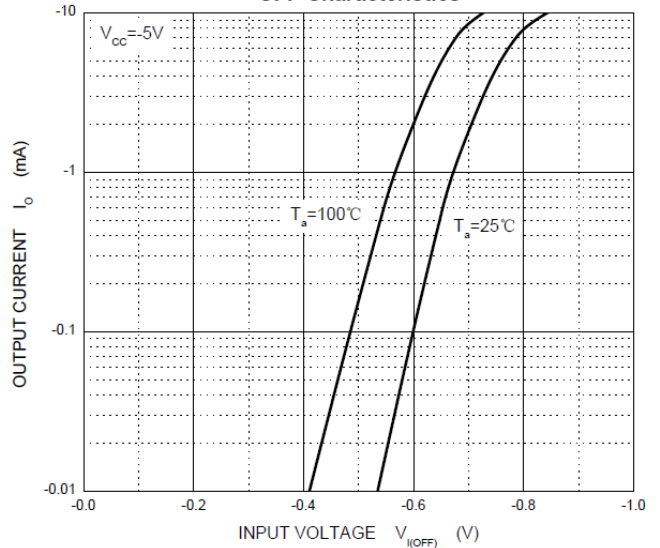


CHARACTERISTICS CURVE

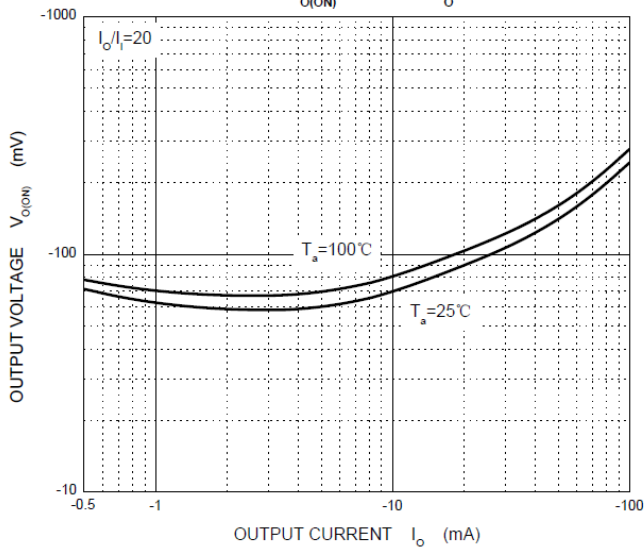
ON Characteristics



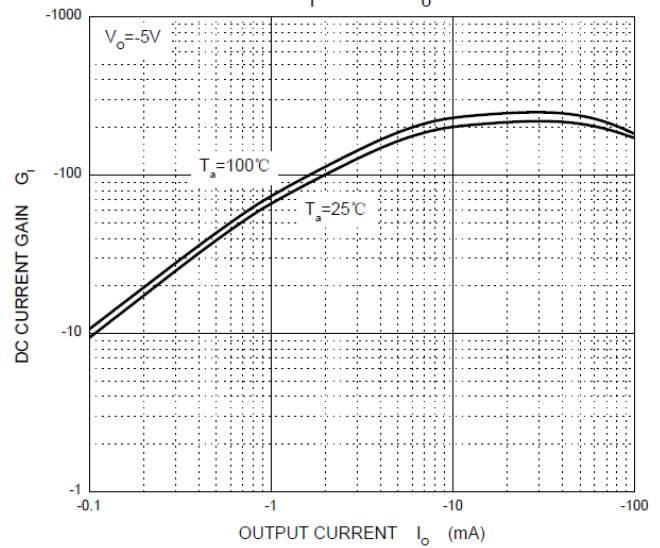
OFF Characteristics



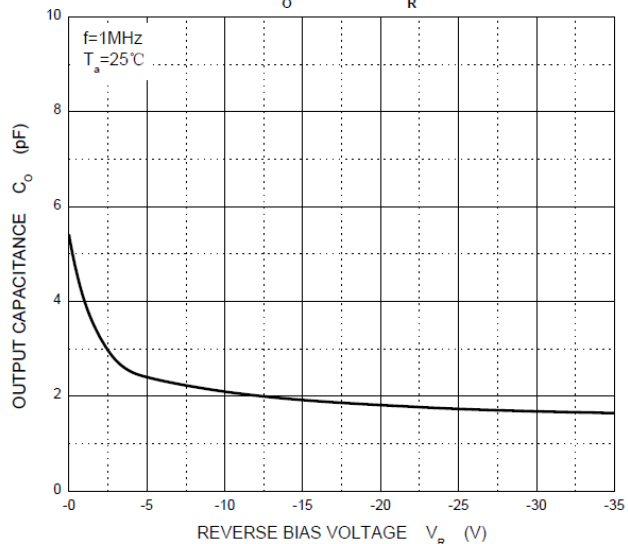
$V_{O(ON)}$ — I_O



G_I — I_O



C_O — V_R



P_D — T_a

