

# Dual PNP Digital Transistor

- Pb-Free Package is Available.

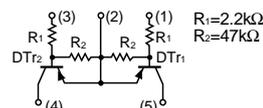
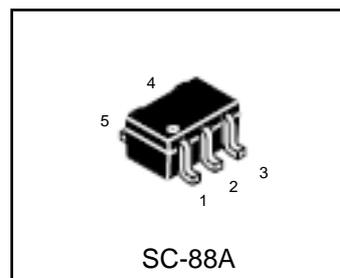
## Ordering Information

Device	Marking	Shipping
LUMA5NT1G	A5	3000/Tape&Reel
LUMA5NT3G	A5	10000/Tape&Reel

## ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ )

Rating	Symbol	Value	Unit
Supply voltage	$V_{CC}$	-50	Vdc
Input voltage	$V_{IN}$	-12 to +5	Vdc
Output current	$I_O$	-100	mA <sub>dc</sub>
Power dissipation	$P_D$	150	mW
Storage Temperature	$T_{slg}$	-55 to +150	$^\circ\text{C}$

**LUMA5NT1G**



## Electrical characteristics ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	-	-	-0.5	V	$V_{CC}=-5\text{V}$ , $I_O=-100\mu\text{A}$
	$V_{I(on)}$	-1.1	-	-		$V_O=-0.3\text{V}$ , $I_O=-5\text{mA}$
Output voltage	$V_{O(on)}$	-	-0.1	-0.3	V	$I_O/I_I=-5\text{mA}/-0.25\text{mA}$
Input current	$I_I$	-	-	-3.6	mA	$V_I=-5\text{V}$
Output current	$I_{O(off)}$	-	-	-0.5	$\mu\text{A}$	$V_{CC}=-50\text{V}$ , $V_I=0\text{V}$
DC current gain	$G_I$	80	-	-	-	$V_O=-5\text{V}$ , $I_O=-10\text{mA}$
Input resistance	$R_1$	1.54	2.2	2.86	$\text{k}\Omega$	-
Resistance ratio	$R_2/R_1$	17	21	26	-	-
Transition frequency	$f_T$ *	-	250	-	MHz	$V_{CE}=-10\text{V}$ , $I_E=5\text{mA}$ , $f=100\text{MHz}$

\* Characteristics of built-in transistor

# LUMA5NT1G

## ●Electrical characteristic curves

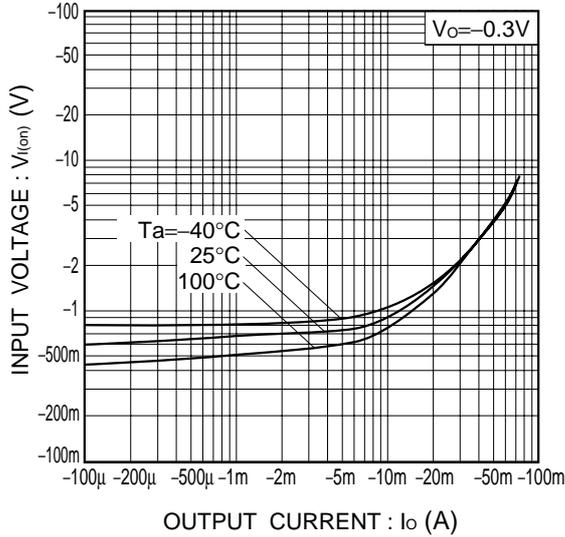


Fig.1 Input voltage vs. output current (ON characteristics)

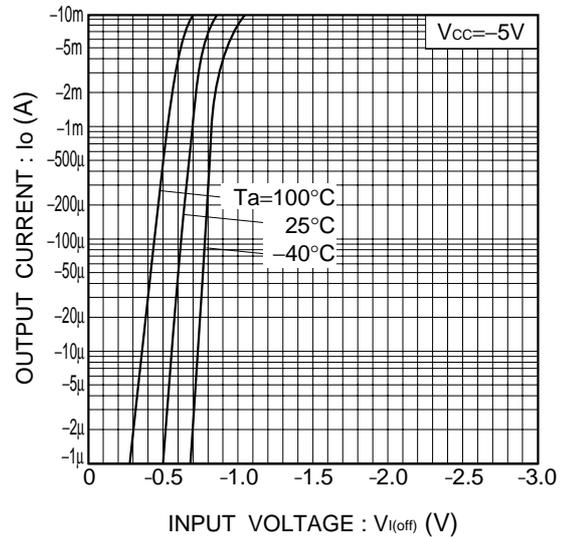


Fig.2 Output current vs. input voltage (OFF characteristics)

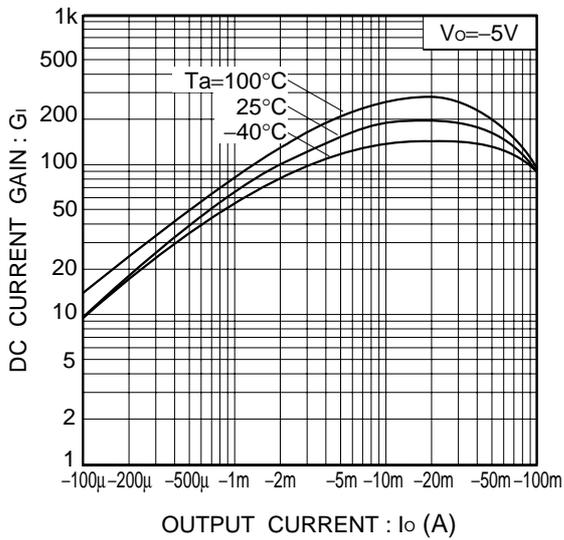


Fig.3 DC current gain vs. output current

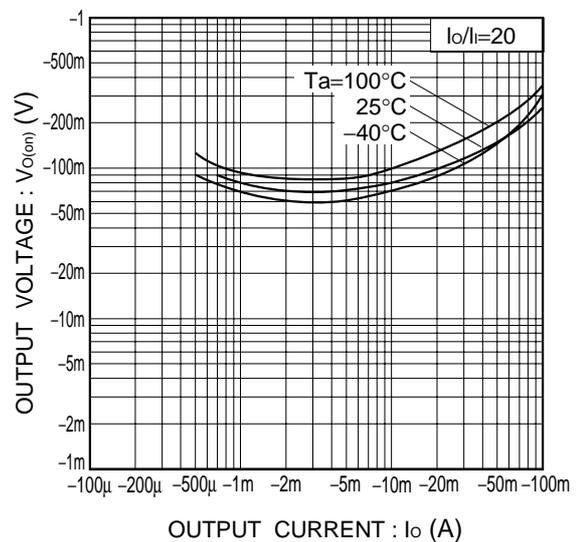
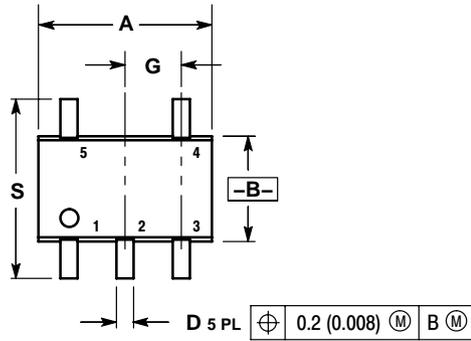


Fig.4 Output voltage vs. output current

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## SC-88A



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.031	0.043	0.80	1.10
D	0.004	0.012	0.10	0.30
G	0.026 BSC		0.65 BSC	
H	---	0.004	---	0.10
J	0.004	0.010	0.10	0.25
K	0.004	0.012	0.10	0.30
N	0.008 REF		0.20 REF	
S	0.079	0.087	2.00	2.20

