

Transistors

● Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Input voltage	$V_{I(off)}$	-	-	0.5	V	$V_{CC}=5V, I_o=100\mu A$
	$V_{I(on)}$	3	-	-		$V_o=0.2V, I_o=5mA$
Output voltage	$V_{O(on)}$	-	0.1	0.3	V	$I_o=10mA, I_i=0.5mA$
Input current	I_i	-	-	0.36	mA	$V_i=5V$
Output current	$I_o(off)$	-	-	0.5	μA	$V_{CC}=50V, V_i=0V$
DC current gain	G_i	56	-	-	-	$V_o=5V, I_o=5mA$
Transition frequency	f_T	-	250	-	MHz	$V_{CE}=10V, I_E=-5mA, f=100MHz$ *
Input resistance	R_1	15.4	22	28.6	$k\Omega$	-
Resistance ratio	R_2/R_1	0.8	1	1.2	-	-

* Characteristics of built-in transistor

● Electrical characteristics curves

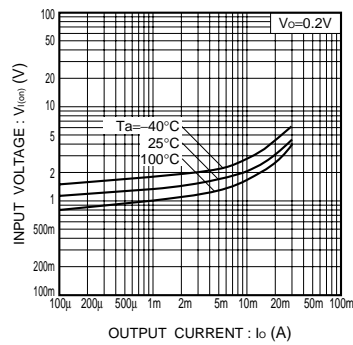


Fig.1 Input voltage vs. output current (ON characteristics)

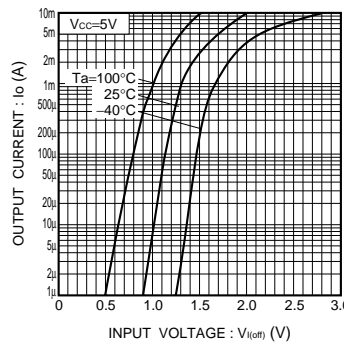


Fig.2 Output current vs. input voltage (OFF characteristics)

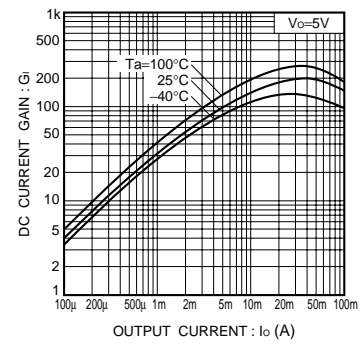


Fig.3 DC current gain vs. output current

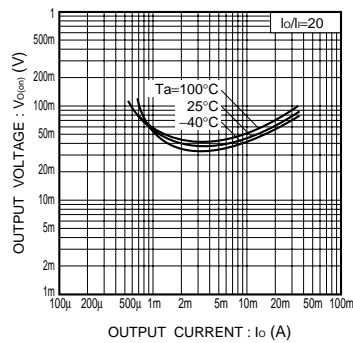


Fig.4 Output voltage vs. output current

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