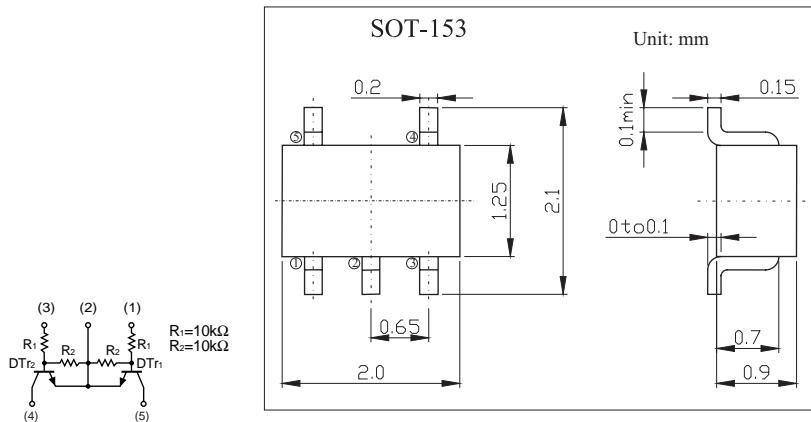


Emitter common (dual digital transistors) FMG9A

■ Features

- Input voltage: $V_{in}=40V$
- Output current: $I_o=50mA$



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Supply voltage	V_{cc}	50	V
Input voltage	V_{in}	40	V
		-10	
Output current	I_o	50	mA
Collector current	$I_c(\text{MAX})$	100	mA
Power dissipation(Total)	P_d	300	mW
Operating and Storage and Temperature Range	T_j, T_{STG}	-55 to +150	°C

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Input voltage	$V_{i(\text{off})}$	$V_{cc}=5V, I_o=100\mu A$			0.5	V
	$V_{i(\text{on})}$	$V_o=0.3V, I_o=10mA$	3			V
Output voltage	$V_o(\text{on})$	$I_o=10mA, I_i=0.5mA$			0.3	V
Input current	I_i	$V_i=5V$			0.88	mA
Output current	$I_o(\text{off})$	$V_{cc}=50V, V_i=0V$			0.5	μA
DC current gain	G_i	$V_o=5V, I_o=5mA$	30			
Transition frequency	f_T	$V_{ce}=10V, I_e=-5mA, f=100MHz$		250		MHz
Input resistance	R_i		7	10	13	kΩ
Resistance ratio	R_2 / R_1		0.8	1	1.2	

■ Marking

Marking	G9
---------	----

FMG9A

■ Typical Characteristics

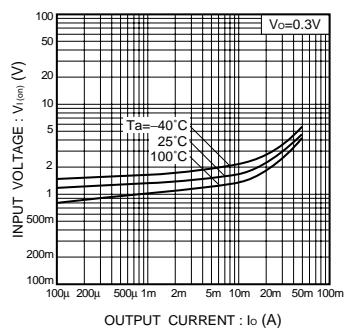


Fig.1 Input voltage vs. output current
(ON characteristics)

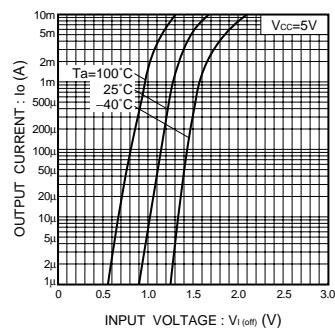


Fig.2 Output current vs. input voltage
(OFF characteristics)

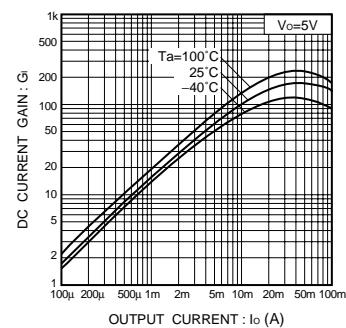


Fig.3 DC current gain vs. output current

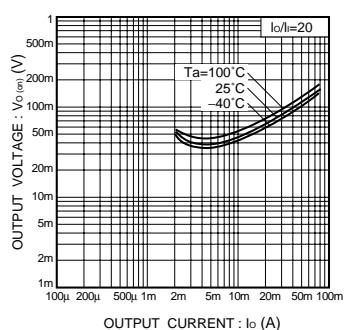


Fig.4 Output voltage vs. output current