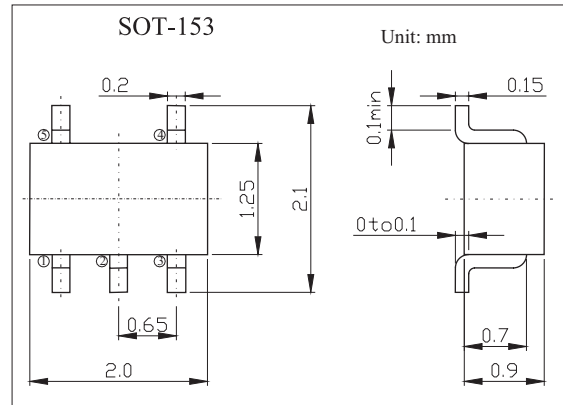
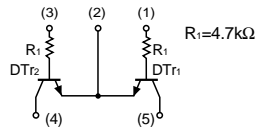


## Emitter common (Dual Digital Transistors) FMG3A

### ■ Features

- Dual NPN digital transistor



### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	50	V
Collector-emitter voltage	$V_{CEO}$	50	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	100	mA
Power dissipation(Total)	$P_d$	300	mW
Operating and Storage and Temperature Range	$T_j, T_{STG}$	-55 to +150	$^\circ\text{C}$

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 50 \mu\text{A}, I_E = 0$	50			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1 \text{mA}, I_B = 0$	50			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_C = 50 \mu\text{A}, I_C = 0$	5			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=50\text{V}, I_E=0$			0.5	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB}= 4\text{V}, I_C=0$			0.5	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=5\text{V}, I_C=1\text{mA}$	100	250	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 5 \text{mA}; I_B = 0.25 \text{mA}$			0.3	V
Transition frequency	$f_T$	$V_{CE}=10\text{V}, I_E = -5\text{mA}, f=100\text{MHz}$		250		MHz
Input resistance	$R_1$		3.29	4.7	6.11	k $\Omega$

### ■ Marking

Marking	G3

# FMG3A

## ■ Typical Characteristics

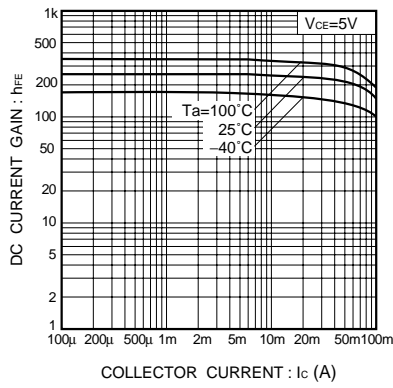


Fig.1 DC current gain vs. collector current

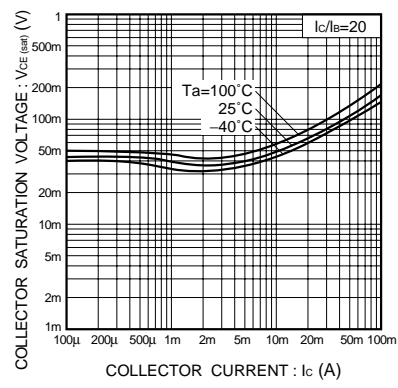


Fig.2 Collector-emitter saturation voltage vs. collector current