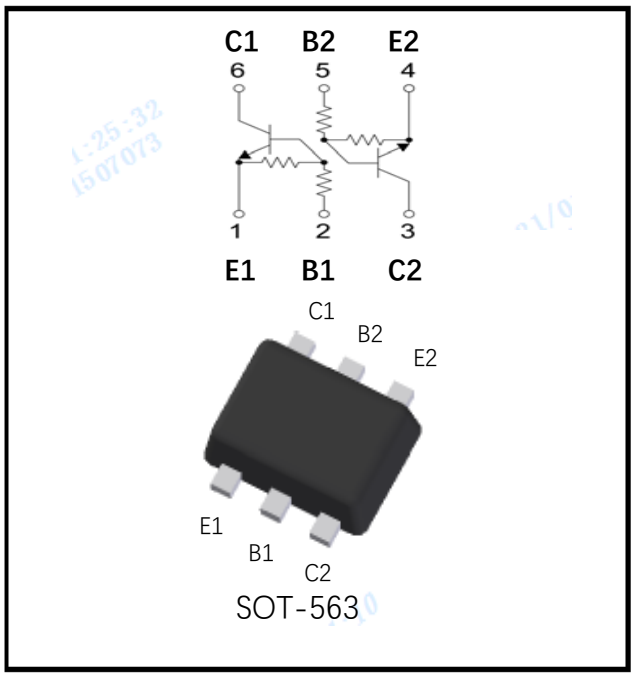
Dual NPN Digital Transistors (Built-in Resistors)



Features

- Epoxy meets UL-94 V-0 flammability rating
- Surface mount package ideally Suited for Automatic Insertion
- NPN+NPN

Mechanical Data

- **Package**: SOT-563
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** H9
- **Solid point:** E1 positioning point

■**Maximum Ratings** (Ta=25℃ Unless otherwise specified）

Item	Symbol	Unit	Conditions	Value
Supply Voltage	VCC	V		50
Input Voltage	VIN	V		-6 to +40
Output Current	IO	mA		100
Power Dissipation	PD	mW		150
Junction Temperature	Tj	℃		150
Storage Temperature	TSTG	℃		-55 to +150

■Electrical Characteristics (Ta=25℃ unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	TYP	Max
Input voltage	$V_{I(off)}$	V	V_{CC}=5V,Ic=100uA	0.3		
	$V_{I(on)}$	V	V_O=0.3V,Ic=1mA			1.4
Output voltage	$V_{O(on)}$	V	Io /Ii =5mA/0.25 mA			0.3
Input current	I_I	mA	V_I=5V			0.88
Output current	$I_{O(off)}$	uA	V_{CC}=50V, Vi=0			0.5
DC current gain	G_I		Vo=5V, Io =5mA	68		
Input resistance	R_1	kΩ		7	10	13
Resistance ratio	R_2/R_1			3.7	4.7	5.7
Transition frequency	f_T	MHz	V_{CE}=10V,I_E=5mA,f=100MHz		250	

■ Ordering Information (Example)

Prefered P/N	Packing Code	Unit Weight(G)	Minimum Package(Pcs)	Inner Box Quantity(Pcs)	Outer Carton Quantity(Pcs)	Delivery Mode
EMH9	F2	Approximate 0.0035	3000	30000	120000	7” reel

■ **Characteristics** (Typical)

Fig. 1 - DC Current Gain Characteristics

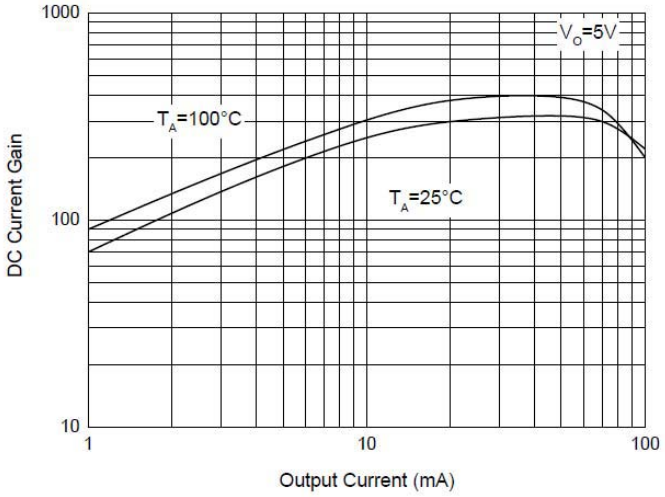


Fig. 2 - Input Voltage (on) Characteristics

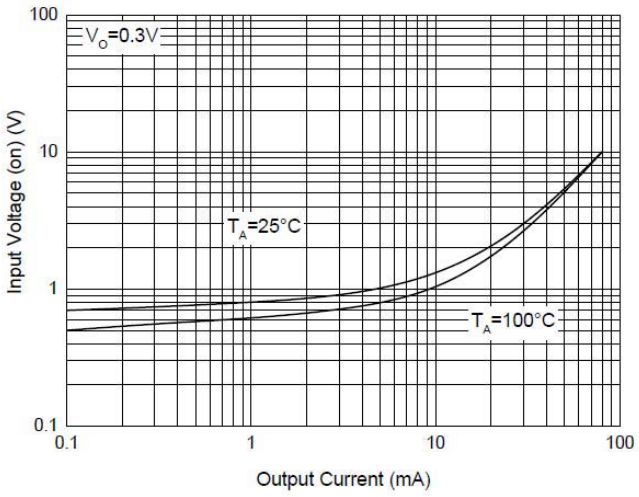


Fig. 3 - Input Voltage (off) Characteristics

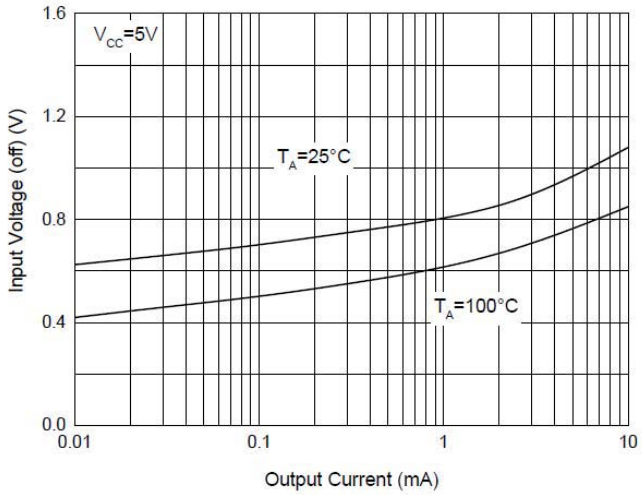
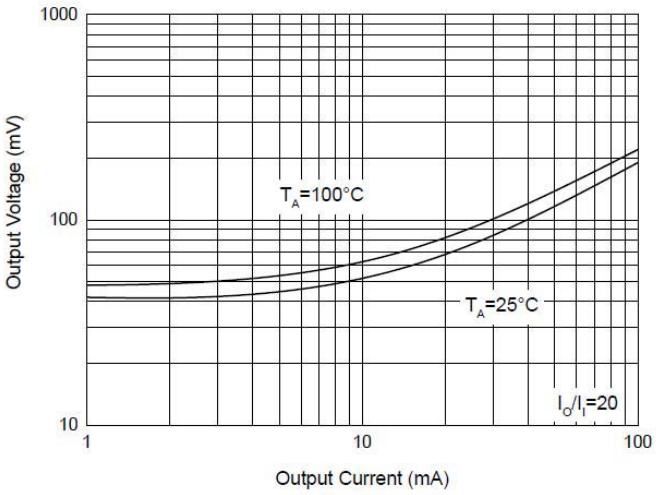
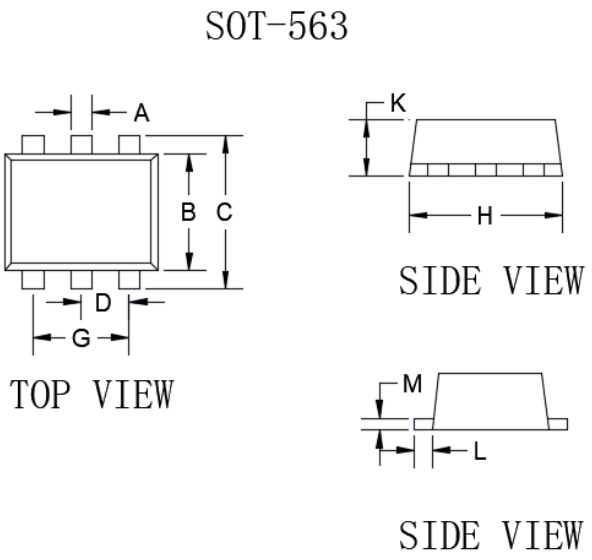


Fig. 4 - Output Voltage Characteristics

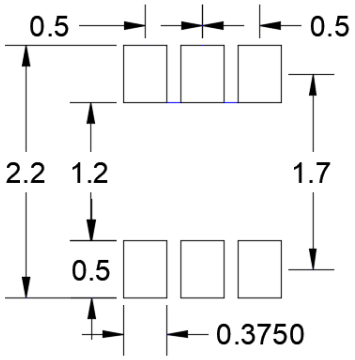


■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MN	MAX
A	0.006	0.011	0.150	0.300
B	0.043	0.051	1.100	1.300
C	0.059	0.067	1.500	1.700
D	0.016	0.024	0.400	0.600
G	0.035	0.043	0.900	1.100
H	0.059	0.067	1.500	1.700
K	0.021	0.026	0.550	0.650
L	0.004	0.011	0.100	0.300
M	0.004	0.007	0.100	0.180

■ Suggested Pad Layout



单位：mm

SUGGESTED SOLDER PAD LAYOUT

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