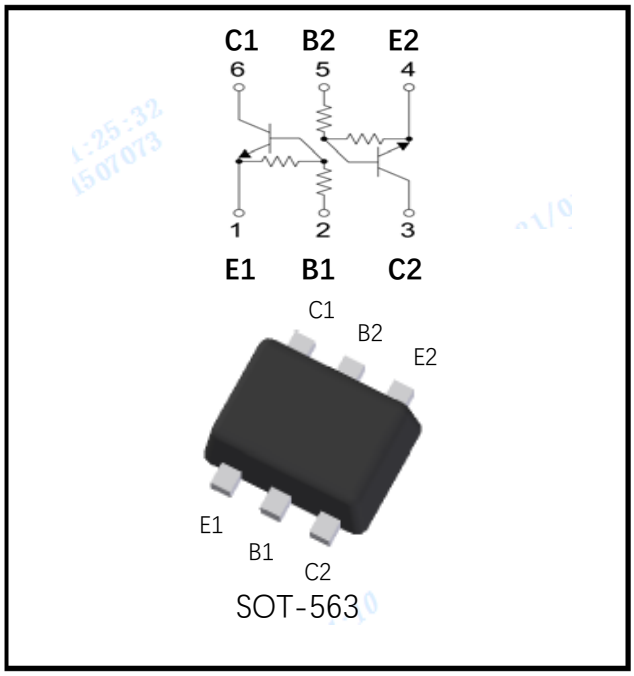
Dual NPN Digital Transistors (Built-in Resistors)



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:** H10
- **Solid point:** E1 positioning point

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

Item	Symbol	Unit	Conditions	Value
Supply Voltage	V_{CC}	V		50
Input Voltage	V_{IN}	V		-5 to +12
Output Current	I_O	mA		100
Power Dissipation	P_D	mW		150
Junction Temperature （Single）	T_J	℃		150
Storage Temperature	T_{STG}	℃		-55 to +150

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

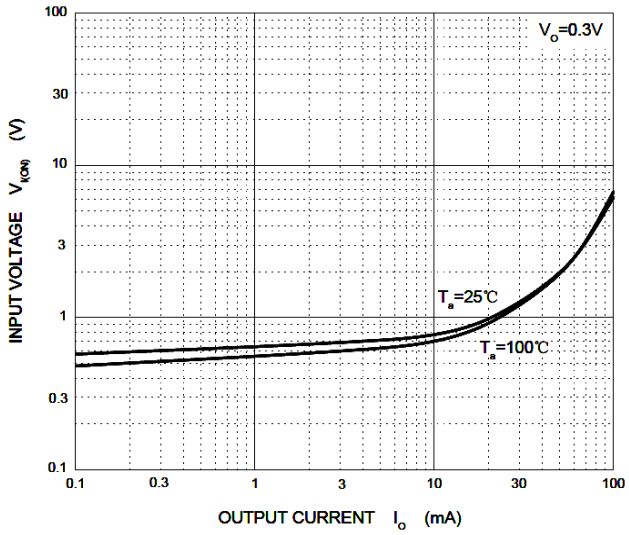
Item	Symbol	Unit	Conditions	Min	TYP	Max
Input voltage	$VI_{(off)}$	V	V_{CC}=5V,Ic=100uA	0.5		
	$VI_{(on)}$	V	V_0=0.3V,Ic=5mA			1.1
Output voltage	$Vo_{(on)}$	V	Io /Ii =5mA/0.25 mA		0.1	0.3
Input current	II	mA	V_I=5V	-	-	3.6
Output current	$I_{O(off)}$	uA	V_{CC}=50V, Vi=0			0.5
DC current gain	GI		Vo=5V, Io =10mA	80		
Input resistance	R_1	kΩ		1.54	2.2	2.86
Resistance ratio	R_2/R_1			17	21	26
Transition frequency	fT	MHz	Vo=10V,IO=5mA,f=100MHz		250	

■ Ordering Information (Example)

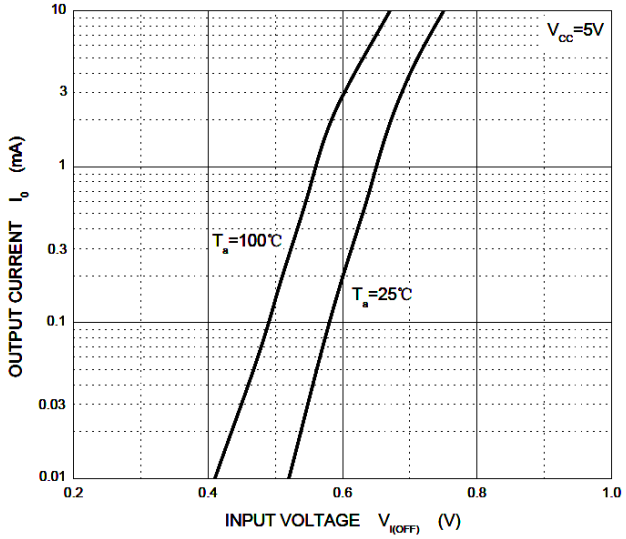
Prefered P/N	Packing Code	Unit Weight(G)	Minimum Package(Pcs)	Inner Box Quantity(Pcs)	Outer Carton Quantity(Pcs)	Delivery Mode
EMH10	F2	Approximate 0.0035	3000	30000	120000	7” reel

■ Characteristics (Typical)

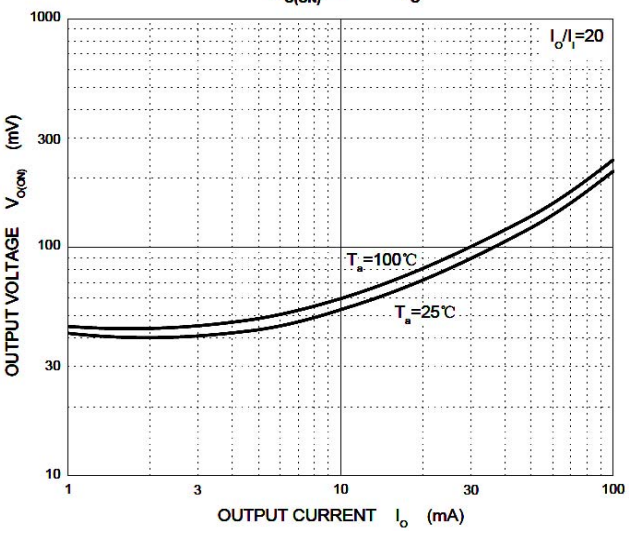
ON Characteristics



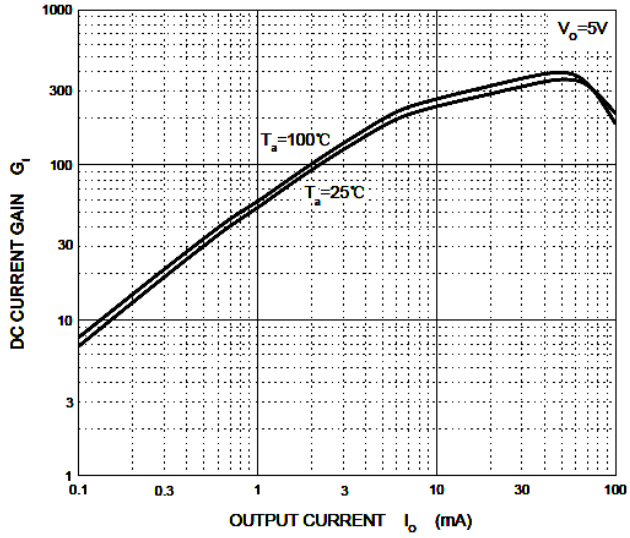
OFF Characteristics



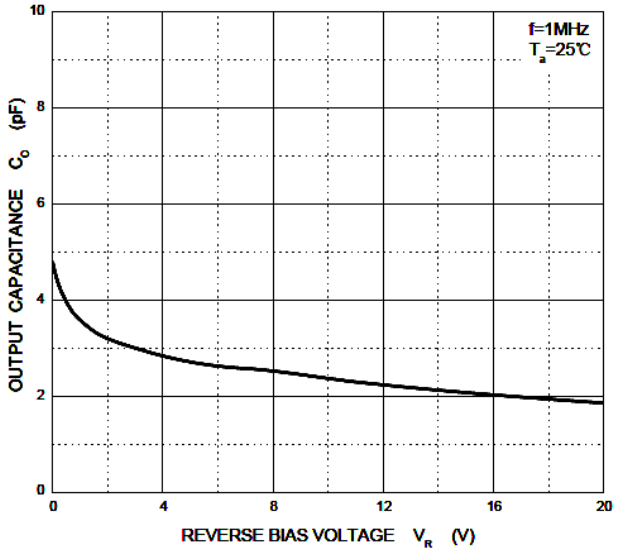
$V_{O(ON)}$ —— I_O



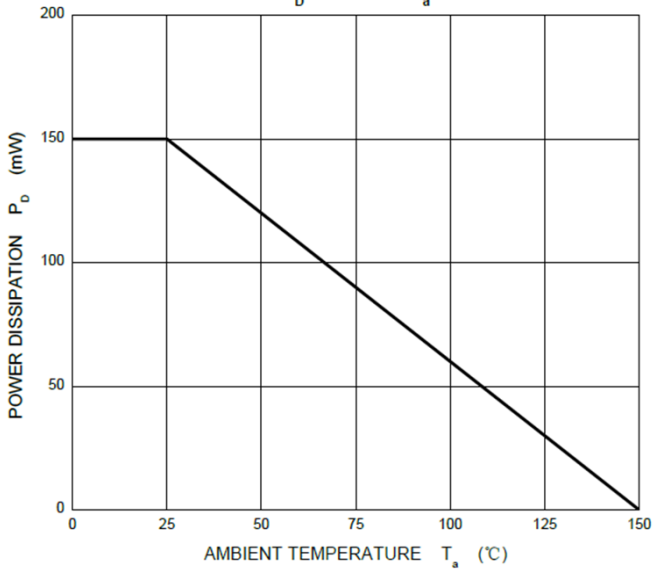
G_I —— I_O



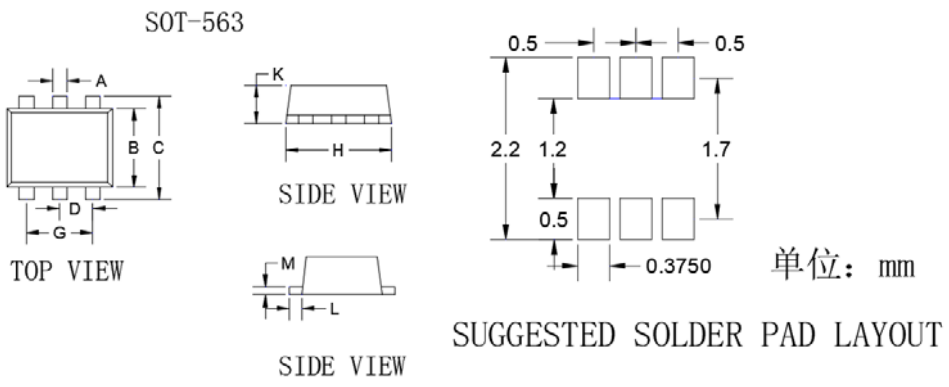
C_O —— V_R



P_D —— T_a



■ SOT-563 Package 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

Note:

1. All dimensions are in millimeters (mm) unless otherwise specified.
[所有尺寸均以毫米为单位，除非另有说明]
2. General tolerances: ±0.10mm unless otherwise specified.
[通用公差为±0.10mm，除非另有说明]
3. Dimensions and tolerances per ASME Y14.5M-2018.
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
4. All dimensions shown are exclusive of burrs and gate residues.
Burrs and gate vestiges shall not exceed 0.15 mm in maximum.
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
5. Dimension b does not include dambar protrusion of max 0.100 mm per side.
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
6. Dimensions B and H are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.
[B和H是塑封体的外部极限尺寸，不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺，但是包含了包封错位的最大尺寸]
7. Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.
[成型的管脚应为同一平面，共面性最大为0.1mm]
8. ★It is the key size.
[★ 标记为关键尺寸]

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