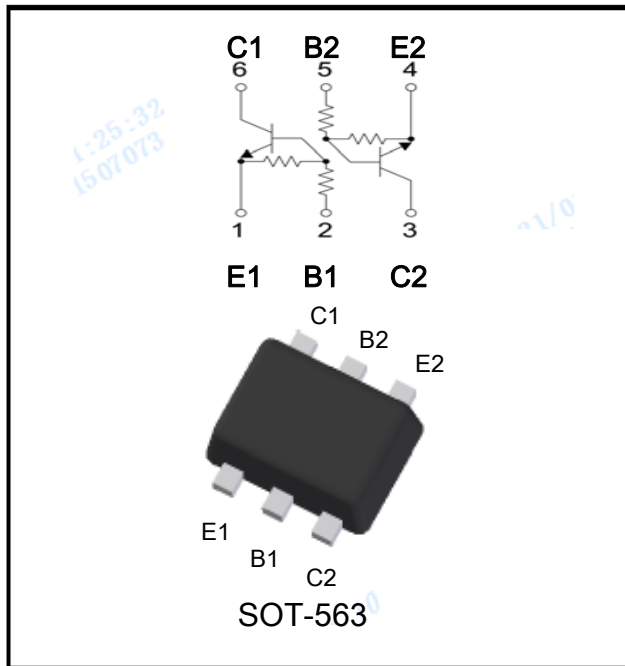


Dual NPN Digital Transistors (Built-in Resistors)



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:** H1
- **Solid point:** E1 positioning point

■Maximum Ratings (Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Supply Voltage	VCC	V		50
Input Voltage	VIN	V		-10 to +40
Output Current	IO	mA		100
Power Dissipation	PD	mW		150
Junction Temperature (Single)	Tj	°C		150
Storage Temperature	TSTG	°C		-55 to +150



EMH1

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

Item	Symbol	Unit	Conditions	Min	TYP	Max
Input voltage	$V_{I(off)}$	V	VCC=5V, Ic=100uA	0.5	-	-
	$V_{I(on)}$	V	V0=0.2V, Ic=5mA	-	-	3
Output voltage	$V_{O(on)}$	V	I _o /I _i =10mA/0.5 mA	-	-	0.3
Input current	I _I	mA	V _I =5V	-	-	0.36
Output current	I _{O(off)}	uA	VCC=50V, V _i =0	-	-	0.5
DC current gain	G _I		V _o =5V, I _o =5mA	56	-	-
Input resistance	R ₁	kΩ		15.4	22	28.6
Resistance ratio	R ₂ /R ₁			0.8	1	1.2
Transition frequency	f _T	MHz	VCE=10V, I _E =5mA, f=100MHz	-	250	-

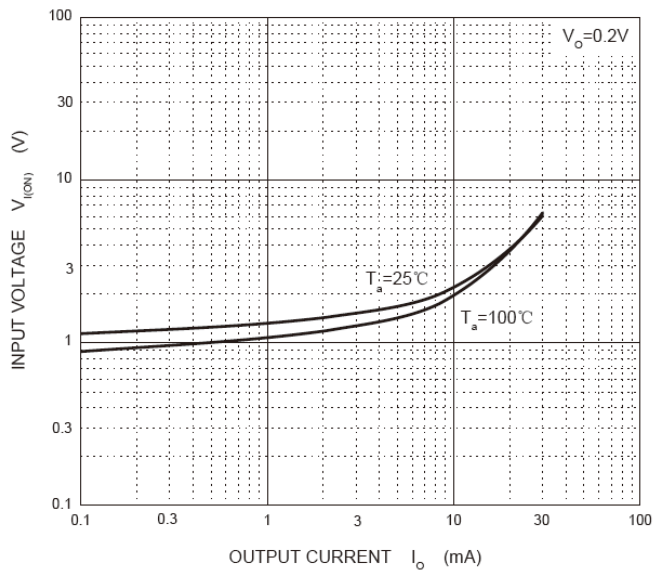
■ Ordering Information (Example)

Preferred P/N	Packing Code	Unit Weight(G)	Minimum Package(Pcs)	Inner Box Quantity(Pcs)	Outer Carton Quantity(Pcs)	Delivery Mode
EMH1	F2	Approximate 0.0035	3000	30000	120000	7" reel

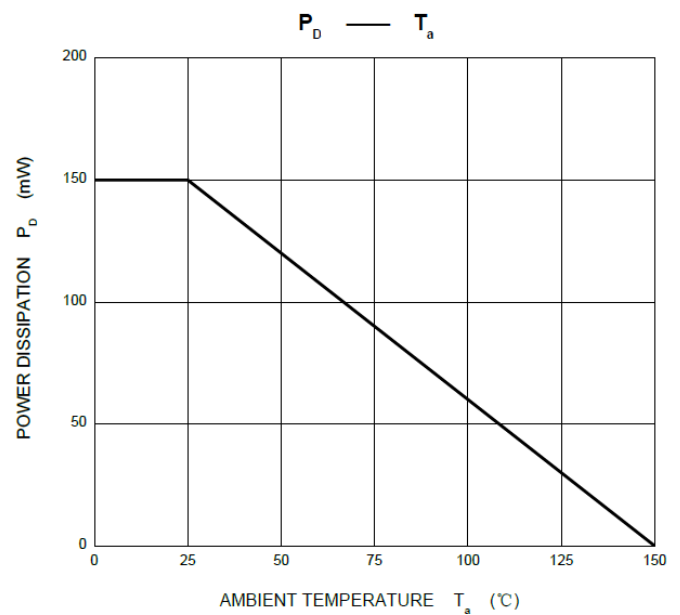
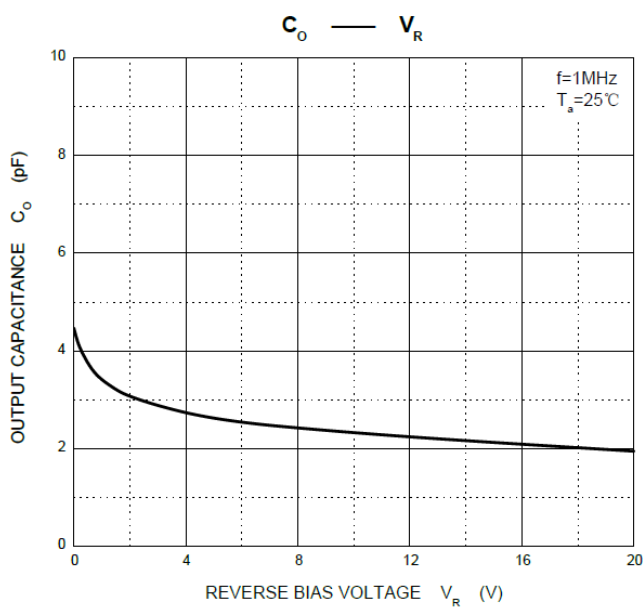
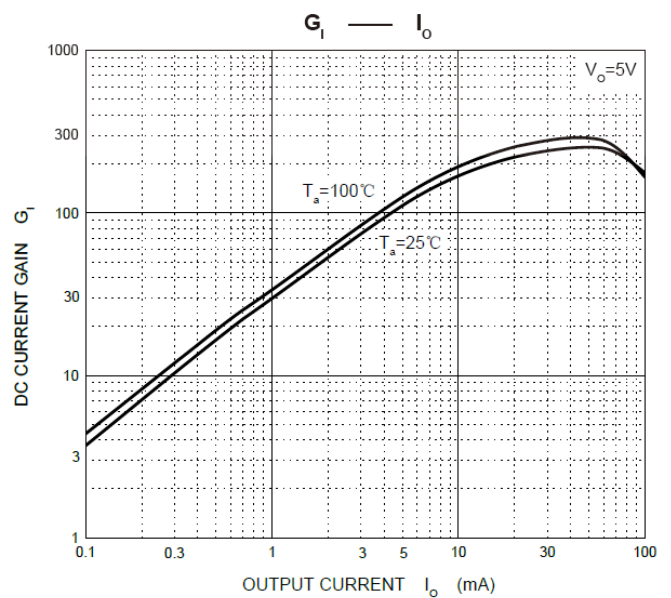
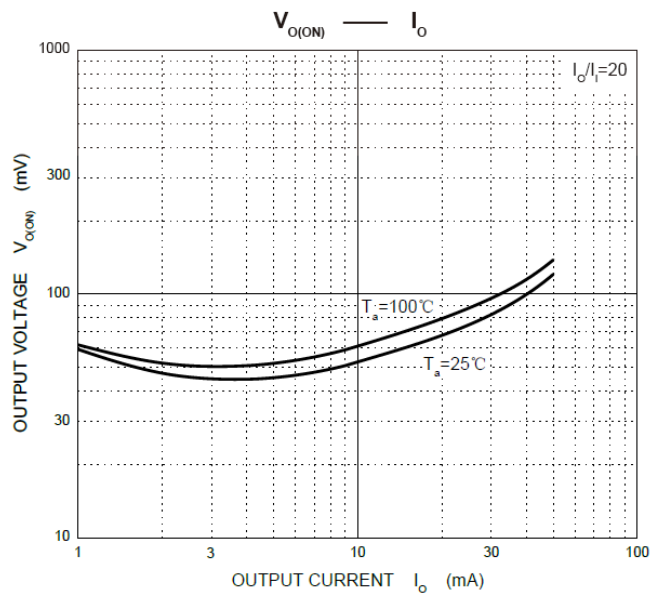
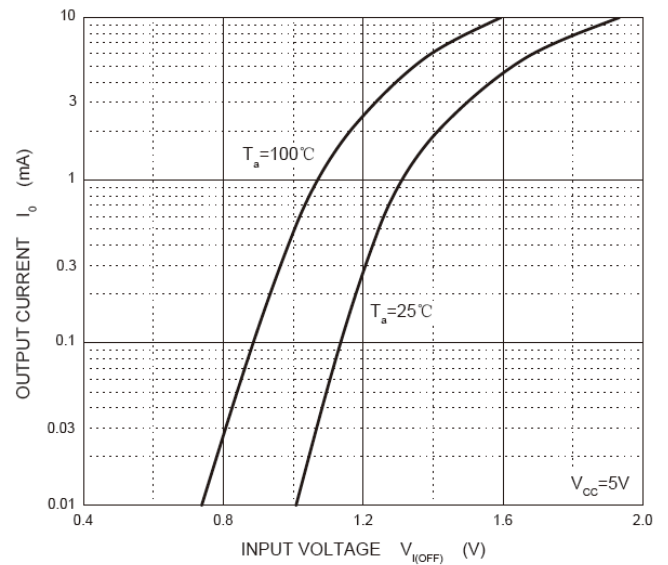


■ Characteristics (Typical)

ON Characteristics



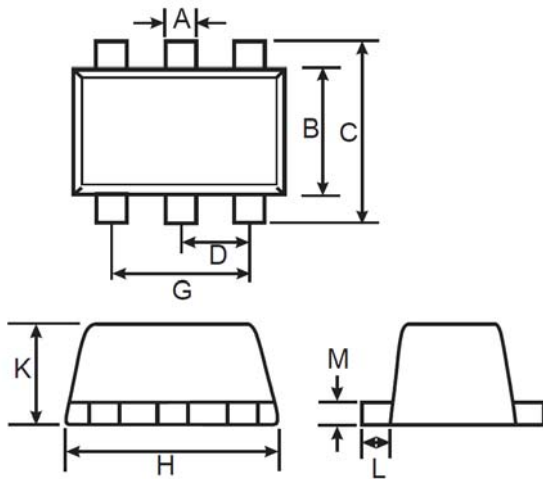
OFF Characteristics





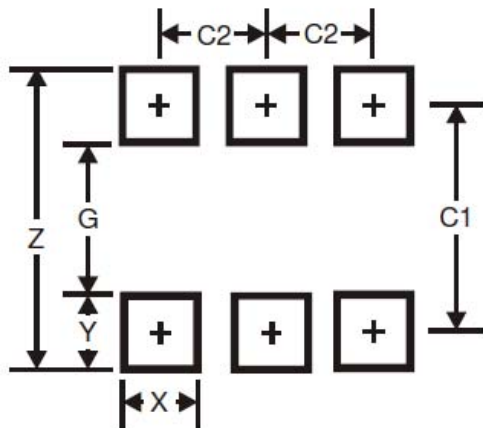
EMH1

■ SOT-563 Package Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.006	0.011	0.15	0.30
B	0.043	0.051	1.10	1.30
C	0.059	0.067	1.50	1.70
D	0.016	0.024	0.40	0.60
G	0.035	0.043	0.90	1.10
H	0.059	0.067	1.50	1.70
K	0.021	0.026	0.55	0.65
L	0.004	0.011	0.10	0.30
M	0.004	0.007	0.10	0.18

■ SOT-563 Suggested Pad Layout



Dimensions	Value (in mm)
Z	2.2
G	1.2
X	0.375
Y	0.5
C1	1.7
C2	0.5



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