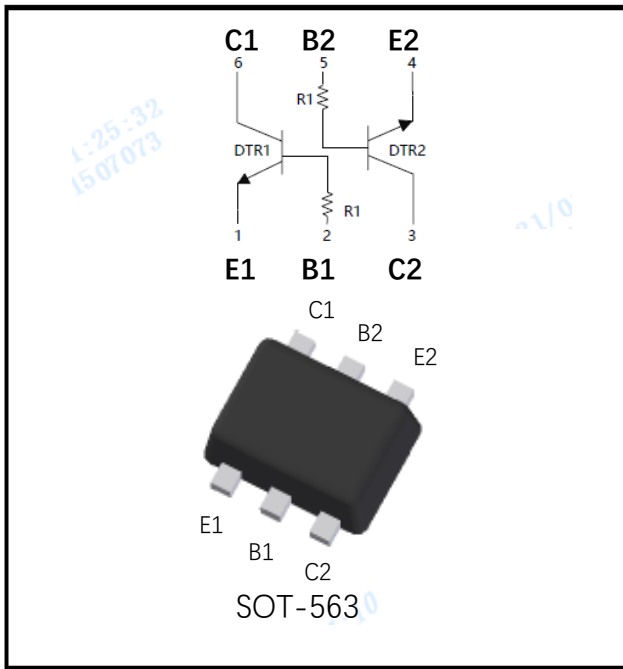


Digital Transistors (Built-in Resistors)



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:** H4
- **Solid point:** E1 positioning point

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

Item	Symbol	Unit	Conditions	Value
Collector-Base Voltage	V_{CBO}	V		50
Collector-Emitter Voltage	V_{CEO}	V		50
Emitter-Base Voltage	V_{EBO}	V		5
Collector Current	I_C	mA		100
Power Dissipation	P_D	mW		150
Junction Temperature (Single)	T_J	°C		150
Storage Temperature	T_{STG}	°C		-55 to +150



EMH4

■ Electrical Characteristics (Ta=25°C unless otherwise specified)

ITEM	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Collector-Base Breakdown Voltage	V_{CBO}	V	$I_C=50\mu A$	50		
Collector-Emitter Breakdown Voltage	V_{CEO}	V	$I_C=1mA$	50		
Emitter-Base Breakdown Voltage	V_{EBO}	V	$I_E=50\mu A$	5		
Collector Cut-off Current	I_{CBO}	μA	$V_{CB}=50V$			0.5
Emitter Cut-off Current	I_{EBO}	μA	$V_{EB}=4V$			0.5
DC current gain	h_{FE}		$V_{CE}=5V, I_C=1mA$	100		600
Input resistance	R_1	$k\Omega$		7	10	13
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	V	$I_C=10mA, I_B=1mA$			0.3
Transition frequency	f_T	MHz	$V_{CE}=10V, I_E=5mA, f=100MHz$		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
EMH4	F2	Approximate 0.0035	3000	30000	120000	7" reel

■ Characteristics (Typical)

Fig. 1 - Static Characteristics

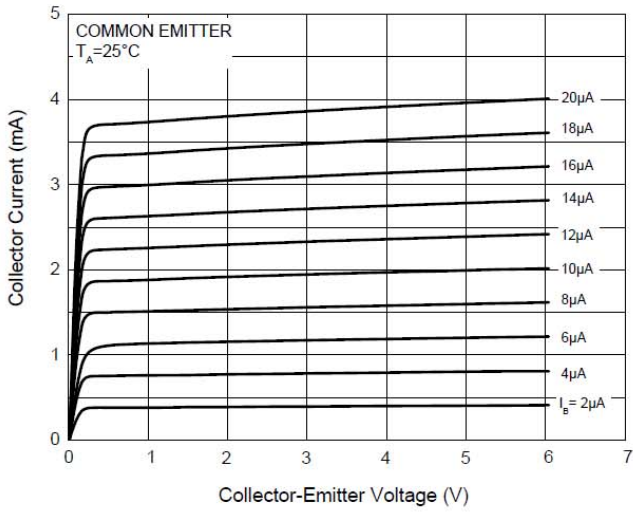


Fig. 2 - DC Current Gain Characteristics

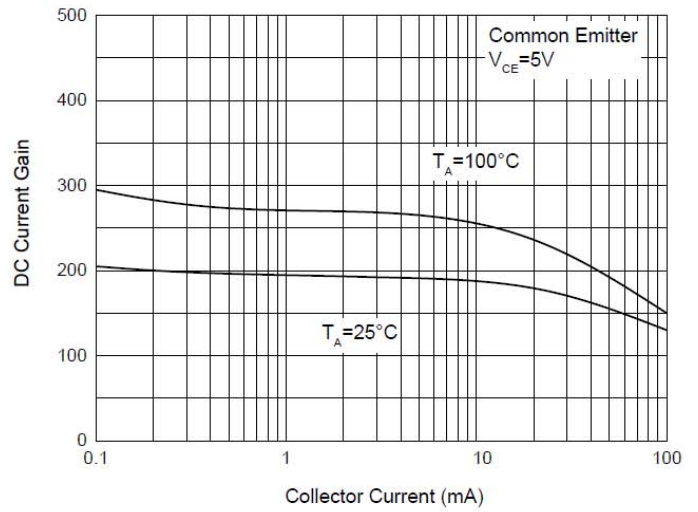


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

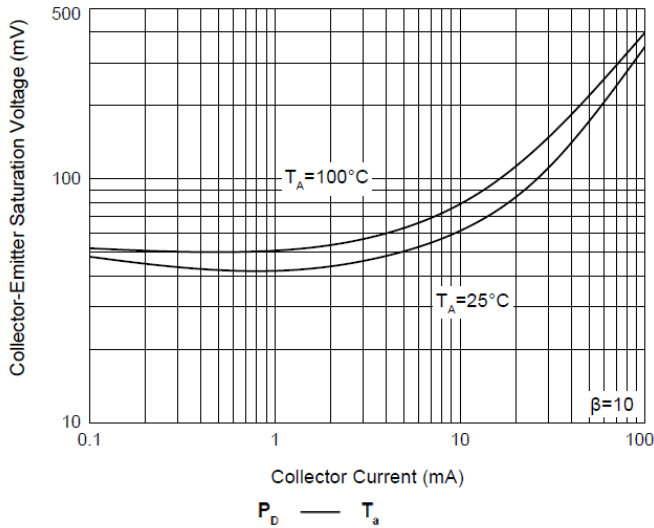
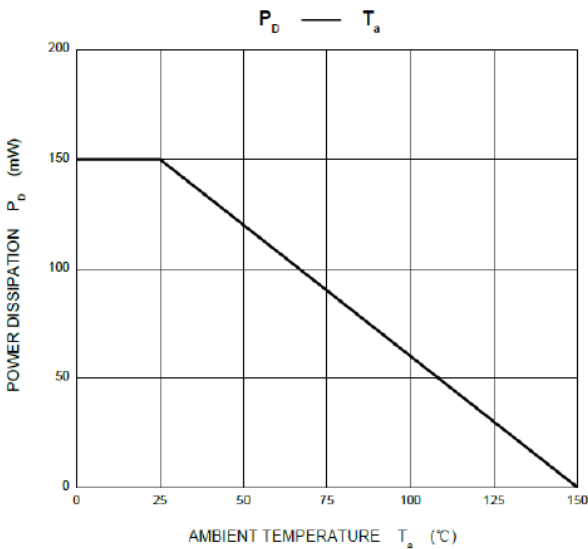
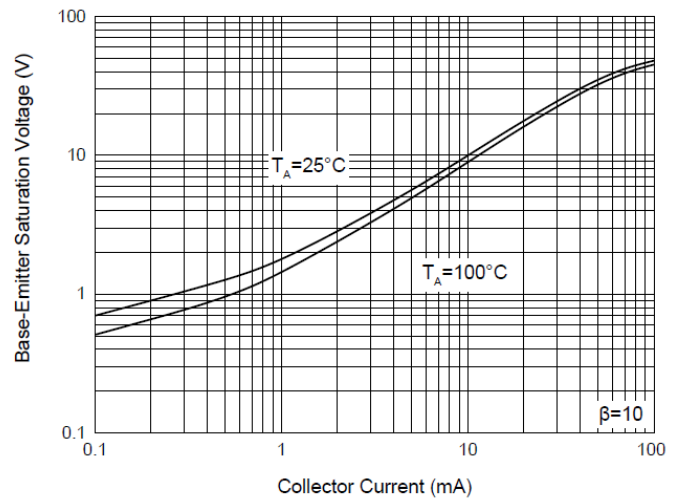
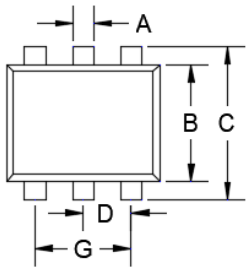


Fig. 4 - Base-Emitter Saturation Voltage Characteristics

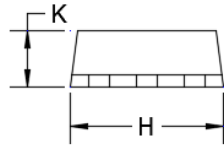


■ Outline Dimensions

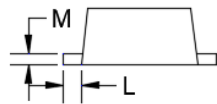
SOT-563



TOP VIEW



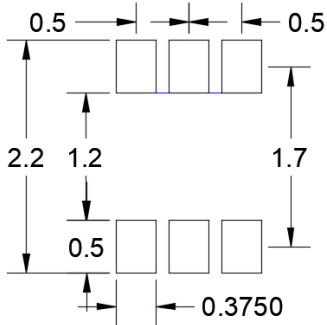
SIDE VIEW



SIDE VIEW

DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	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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