

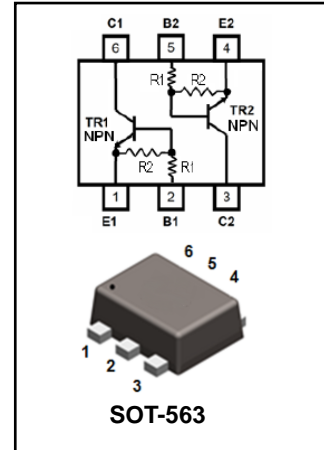


### Features

- Two DTC143Z chip in SOT-563 Package
- Transistor elements are independent, eliminating interference
- Mounting cost and area can be cut in half

### Mechanical Data

- Case: SOT-563
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208



### Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
EMH25	SOT-563	3000 pcs / Tape & Reel	H25

### Maximum Ratings (@ T<sub>A</sub> = 25°C unless otherwise specified)

Symbol	Parameter	Value		Unit
		Tr1	Tr2	
V <sub>CC</sub>	Supply Voltage	50	50	V
V <sub>IN</sub>	Input Voltage	-5 to +30	-5 to +30	V
I <sub>o</sub>	Output Current	100	100	mA
I <sub>C(MAX.)</sub>	Collector Current	100	100	mA

### Thermal Characteristics

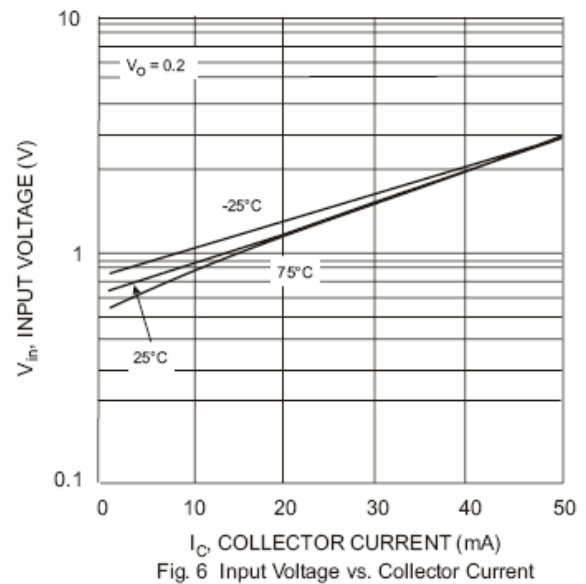
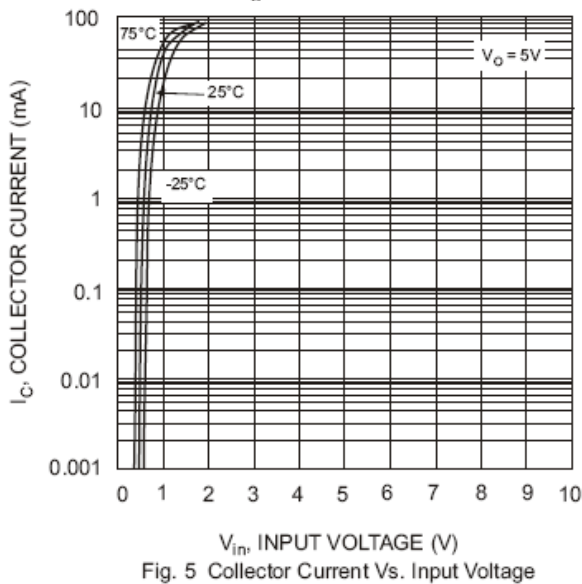
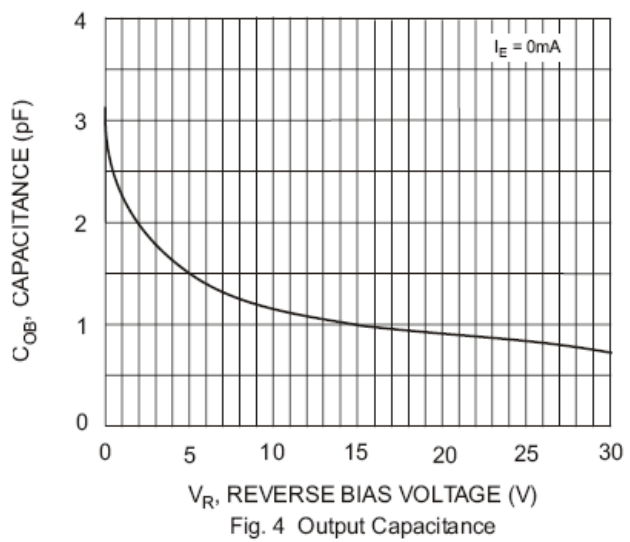
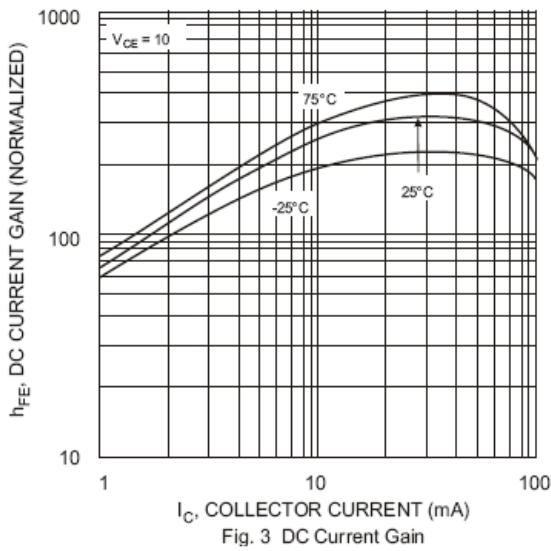
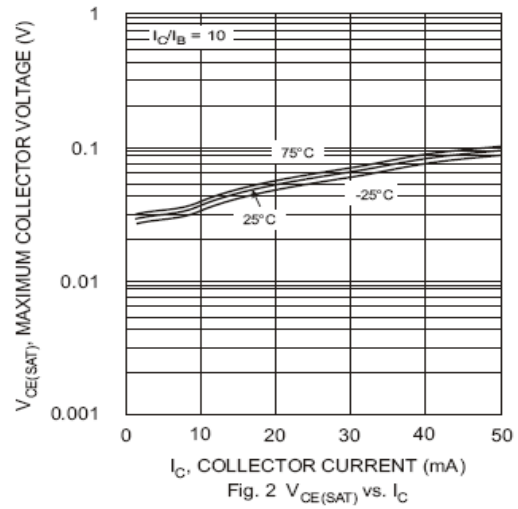
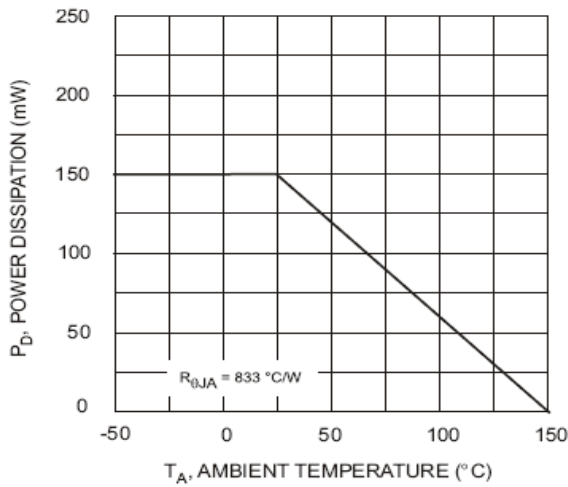
Parameter	Symbol	Value	Unit
Power Dissipation	P <sub>D</sub>	150	mW
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C



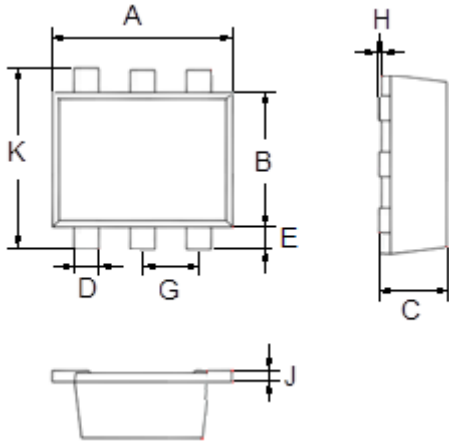
### Electrical Characteristics-TR1 and TR2 (@ T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input Voltage	V <sub>I(off)</sub>	V <sub>CC</sub> = 5V, I <sub>O</sub> = 100μA	0.5	-	-	V
	V <sub>I(on)</sub>	V <sub>O</sub> = 0.3V, I <sub>O</sub> = 5mA	-	-	1.3	V
Output Voltage	V <sub>O(on)</sub>	I <sub>O</sub> = 5mA, I <sub>I</sub> = 0.25mA	-	0.1	0.3	V
Input Current	I <sub>I</sub>	V <sub>I</sub> = 5V	-	-	1.8	mA
Output Current	I <sub>O(off)</sub>	V <sub>CC</sub> = 50V, V <sub>I</sub> = 0V	-	-	0.5	μA
DC Current Gain	G <sub>I</sub>	V <sub>O</sub> = 5V, I <sub>O</sub> = 10mA	80	-	-	-
Input Resistor	R <sub>1</sub>		3.29	4.7	6.11	kΩ
Resistance Ratio	R <sub>2</sub> /R <sub>1</sub>		8	10	12	
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>E</sub> = -5mA, f = 100MHz	-	250	-	MHz

# Ratings and Characteristics Curves-TR1 and TR2 (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)



**Package Outline Dimensions** (Unit: mm)



SOT-563		
Dimension	Min.	Max.
A	1.500	1.700
B	1.100	1.300
C	0.525	0.600
D	0.170	0.270
E	0.100	0.300
G	0.450	0.550
H	0.000	0.050
J	0.090	0.160
K	1.500	1.700

**Package Outline Dimensions** (Unit: mm)

SOT-563

