

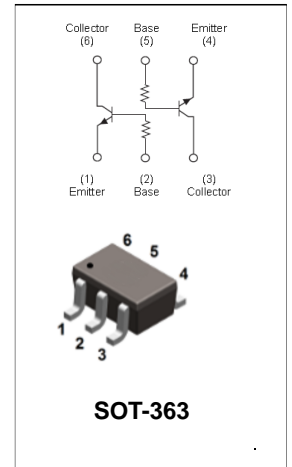


Features

- Two DTC143T chips in one Package
- Transistor elements are independent, eliminating interference
- Mounting cost and area can be cut in half

Mechanical Data

- Case: SOT-363
- 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
UMH3N	SOT-363	3000 pcs / Tape & Reel	H3

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	50	V
V _{EBO}	Emitter-Base Voltage	5	V
I _{C(Max)}	Collector Current	100	mA

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation ^{*1}	P _D	150	mW
Thermal Resistance, Junction to Ambient Air	R _{θJA}	833	°C/W
Operating Junction Temperature Range	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

Note 1: 120mW per element must not be exceeded



Electrical Characteristics (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C = 50μA, I _E = 0	50	-	-	V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C = 1mA, I _B = 0	50	-	-	V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E = 50μA, I _C = 0	5	-	-	V
Collector-base Cut-off Current	I _{CBO}	V _{CB} = 50V, I _E = 0	-	-	0.5	μA
Emitter-base Cut-off Current	I _{EBO}	V _{EB} = 4V, I _C = 0	-	-	0.5	μA
DC Current Gain	h _{FE}	I _C = 1mA, V _{CE} = 5V	100	-	600	-
Collector-Emitter saturation voltage	V _{CE(sat)}	I _C /I _B = 5mA/0.25mA	-	-	0.3	V
Input Resistor	R ₁		3.29	4.7	6.11	kΩ
Gain-Bandwidth Product	f _T	V _{CE} = 10V, I _E = -5mA f = 100MHz	-	250	-	MHz



Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

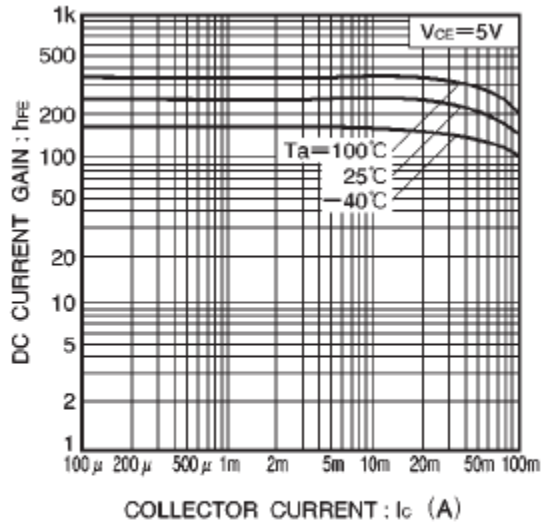


Fig.1 DC current gain vs. collector current

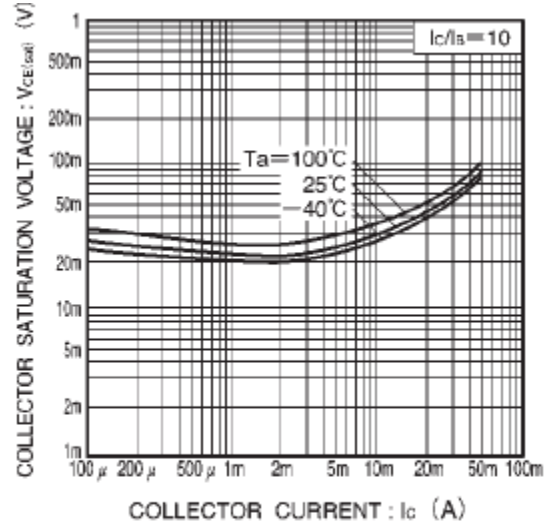
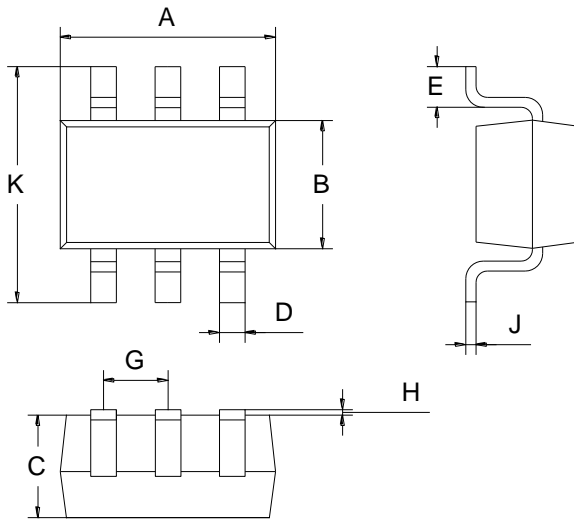


Fig.2 Collector-emitter saturation voltage vs. collector current



SOT-363		
Dimension	Min.	Max.
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40

Mounting Pad Layout (Unit: mm)

SOT-363

