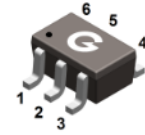
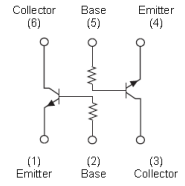


Features

- Two DTC143T chips in one Package
- Transistor elements are independent, eliminating interference
- Mounting cost and area can be cut in half
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



SOT-363

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
TUMH3N	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 (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = 50\mu\text{A}$, $I_E = 0$	50	-	-	V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 1\text{mA}$, $I_B = 0$	50	-	-	V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = 50\mu\text{A}$, $I_C = 0$	5	-	-	V
Collector-base Cut-off Current	I_{CBO}	$V_{CB} = 50\text{V}$, $I_E = 0$	-	-	0.5	μA
Emitter-base Cut-off Current	I_{EBO}	$V_{EB} = 4\text{V}$, $I_C = 0$	-	-	0.5	μA
DC Current Gain	h_{FE}	$I_C = 1\text{mA}$, $V_{CE} = 5\text{V}$	100	-	600	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B = 5\text{mA}/0.25\text{mA}$	-	-	0.3	V
Input Resistor	R_1		3.29	4.7	6.11	$k\Omega$
Gain-Bandwidth Product	f_T	$V_{CE} = 10\text{V}$, $I_E = -5\text{mA}$ $f = 100\text{MHz}$	-	250	-	MHz

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

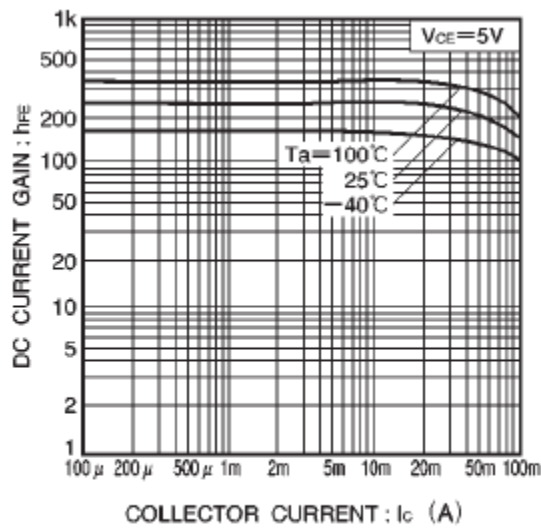


Fig.1 DC current gain vs. collector current

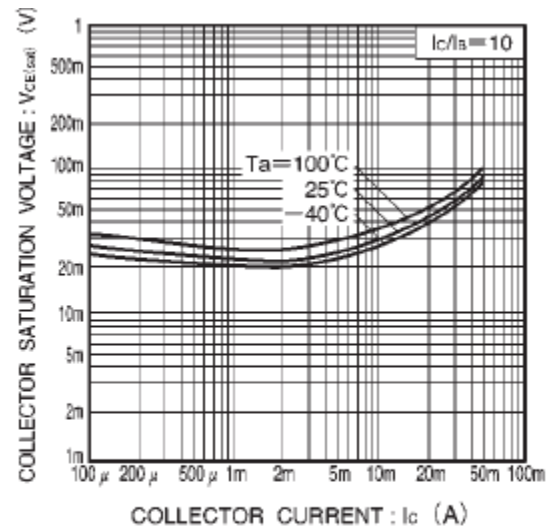
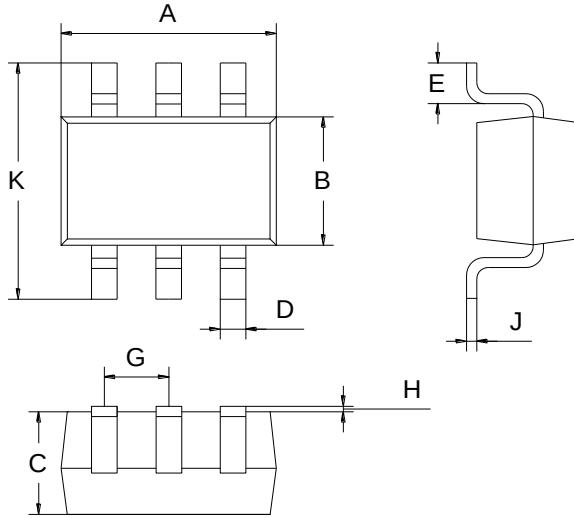


Fig.2 Collector-emitter saturation voltage vs. collector current

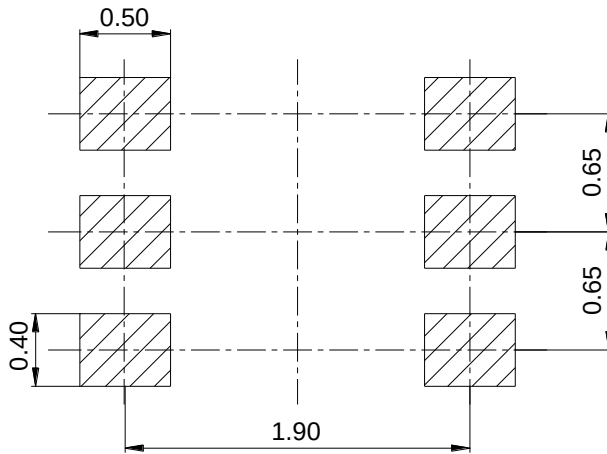
Package Outline Dimensions (Unit: mm)



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



IMPORTANT NOTICE

Changzhou Galaxy Century Microelectronics (GME) reserves the right to make changes without further notice to any product information (copyrighted) herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.