

General purpose (dual digital transistors)

UMH7N

●Feature

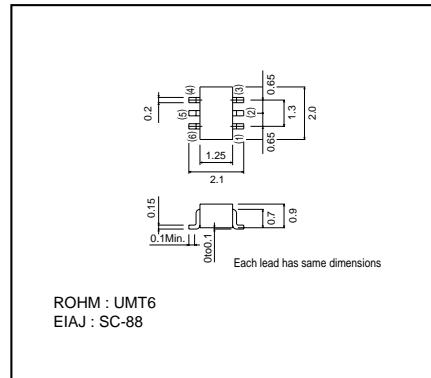
- 1) Includes two DTC143T transistors in a single UMT package.

●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	100	mA
Collector power dissipation	P_C	150 (TOTAL)	mW *1
Junction temperature	T_J	150	°C
Storage temperature	T_{STG}	-55~+150	°C

*1 120mW per element must not be exceeded.

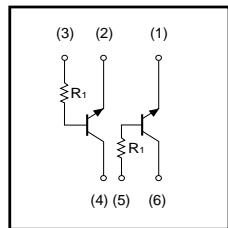
●External dimensions (Units : mm)



●Package, marking, and Packaging specifications

Part No.	UMH7N
Package	UMT6
Marking	H7
Code	TR
Basic ordering unit (pieces)	3000

●Equivalent circuit



●Electrical characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	50	—	—	V	$I_C=50\mu\text{A}$
Collector-emitter breakdown voltage	BV_{CEO}	50	—	—	V	$I_C=1\text{mA}$
Emitter-base breakdown voltage	BV_{EBO}	5	—	—	V	$I_E=50\mu\text{A}$
Collector cutoff current	I_{CBO}	—	—	0.5	μA	$V_{CE}=50\text{V}$
Emitter cutoff current	I_{EBO}	—	—	0.5	μA	$V_{EB}=4\text{V}$
DC current transfer ratio	h_{FE}	100	250	600	—	$V_{CE}/I_C=5\text{V}/1\text{mA}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	0.3	V	$I_C/I_S=5\text{mA}/0.25\text{mA}$
Input resistance	R_1	3.29	4.7	6.11	$\text{k}\Omega$	—