

# General purpose (dual digital transistors)

## UMH7N

### ●Feature

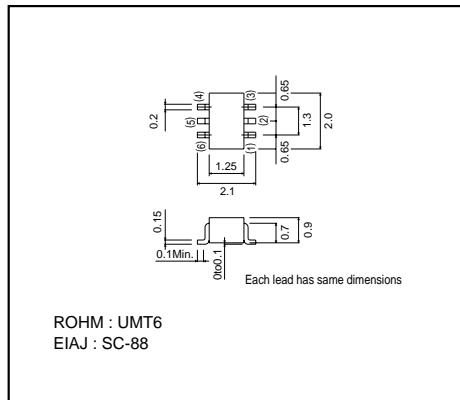
- Includes two DTC143T transistors in a single UMT package.

### ●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.

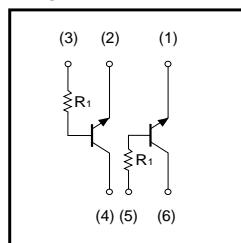
### ●External dimensions (Units : mm)



### ●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	$\mu\text{A}$	$V_{CB}=50\text{V}$
Emitter cutoff current	$I_{EBO}$	—	—	0.5	$\mu\text{A}$	$V_{EB}=4\text{V}$
DC current transfer ratio	$h_{FE}$	100	250	600	—	$V_{CE}/I_C=5\text{V}/1\text{mA}$
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	—	—	0.3	V	$I_C/I_S=5\text{mA}/0.25\text{mA}$
Input resistance	$R_I$	3.29	4.7	6.11	k $\Omega$	—