

# EMH7 / UMH7N

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$R_1 = 4.7k\Omega$

Type	EMH7	UMH7N
Package	EMT6	UMT6
Marking	H7	H7
Code	TR	TR
Basic ordering unit (pieces)	8000	3000

EMH7

1.6  
1.0  
0.5, 0.5  
0.6 ± 0.1  
1.2  
1.2  
0.22  
1 pin mark  
0.5  
0.13

Each lead has same dimensions

UMH7N

0.2  
1.3  
2.0  
0.65  
0.65  
1.25  
2.1  
0.15  
0.1 Min.  
0.1  
0.7  
0.9

Each lead has same dimensions

Parameter	Symbol	Limits	Unit
Collector-base voltage	V <sub>CBO</sub>	50	V
Collector-emitter voltage	V <sub>CEO</sub>	50	V
Emitter-base voltage	V <sub>EB0</sub>	5	V
Collector current	I <sub>C</sub>	100	mA
Power dissipation	P <sub>d</sub>	150(TOTAL)	mW *
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	$BV_{CBO}$	50	—	—	V	$I_C=50\mu A$
Collector-emitter breakdown voltage	$BV_{CEO}$	50	—	—	V	$I_C=1mA$
Emitter-base breakdown voltage	$BV_{EBO}$	5	—	—	V	$I_E=50\mu A$
Collector cutoff current	$I_{CBO}$	—	—	0.5	$\mu A$	$V_{CB}=50V$
Emitter cutoff current	$I_{EBO}$	—	—	0.5	$\mu A$	$V_{EB}=4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	0.3	V	$I_C/I_E=5mA/0.25mA$
DC current transfer ratio	$h_{FE}$	100	250	600	—	$V_{CE}=5V, I_C=1mA$
Transition frequency	$f_T$	—	250	—	MHz	$V_{CE}=10V, I_E=-5mA, f=100MHz$ *
Input resistance	$R_1$	3.29	4.7	6.11	$k\Omega$	—

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# Transistors

## ●Electrical characteristics curves

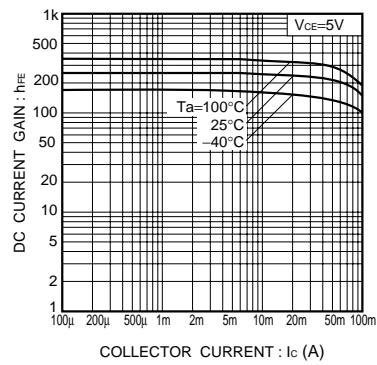


Fig.1 DC current gain vs. collector current

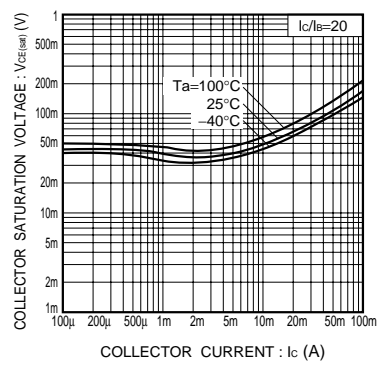


Fig.2 Collector-emitter saturation voltage vs. collector current

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