

UMG4N / UMG7N / UMH4N / UMH8N / FMG4A / FMG7A / IMH4A / IMH8A

1) Two DTC114T chips in a UMT or SMT package.

UMG4N



Parameter

SymbolMin.Tvd.Max.Unit

Conditions

1

Parameter

Symbol

Limits

Unit

Collector-base voltage		V_{CB0}	50	V
Collector-emitter voltage		V_{CE0}	50	V
Emitter-base voltage		V_{EB0}	5	V
Collector current		I_C	100	mA
Power dissipation	UMG4N, UMG7N, UMH4N	P_d	150 (TOTAL)	mW
	FMG4A, FMG7A, IMH4A, IMH8A		300 (TOTAL)	
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	-55~+150	°C

*1 120mW per element must not be exceeded.

*2 200mW per element must not be exceeded.

●Package, marking, and packaging specifications

[illegible]

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	50	—	—	V	$I_C=50\text{ }\mu\text{A}$
Collector-emitter breakdown voltage	BV_{CEO}	50	—	—	V	$I_C=1\text{mA}$
Emitter-base breakdown voltage	BV_{EBO}	5	—	—	V	$I_E=50\text{ }\mu\text{A}$
Collector cutoff current	I_{CBO}	—	—	0.5	μA	$V_{CB}=50\text{V}$
Emitter cutoff current	I_{EBO}	—	—	0.5	μA	$V_{EB}=4\text{V}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	0.3	V	$I_C/I_E=10\text{mA}/1\text{mA}$
DC current transfer ratio	h_{FE}	100	250	600	—	$V_{CE}=5\text{V}$, $I_C=1\text{mA}$
Transition frequency	f_T	—	250	—	MHz	$V_{CE}=10\text{V}$, $I_E=-5\text{mA}$, $f=100\text{MHz}$ *
Input resistance	R_i	7	10	13	$\text{k}\Omega$	—