

EMG4 / EMH4 / UMG4N / UMG7N / UMH4N / UMH8N /
Transistors FMG4A / FMG7A / IMH4A / IMH8A

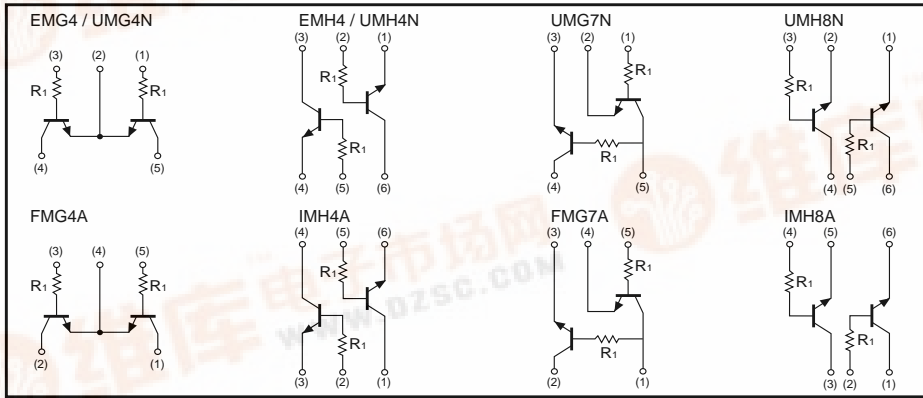
General purpose (dual digital transistors)

EMG4 / EMH4 / UMG4N / UMG7N / UMH4N / UMH8N FMG4A / FMG7A / IMH4A / IMH8A

●Features

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

●Equivalent circuit



●Absolute maximum ratings (Ta = 25°C)

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	EMG4 / EMH4 / UMG4N / UMG7N / UMH4N / UMH8N	P _d	150(TOTAL)	mW *1
	FMG4A / FMG7A / IMH4A / IMH8A		300(TOTAL)	mW *2
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.

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	50	-	-	V	I _c =50μA
Collector-emitter breakdown voltage	BV _{CE0}	50	-	-	V	I _c =1mA
Emitter-base breakdown voltage	BV _{EB0}	5	-	-	V	I _E =50μA
Collector cutoff current	I _{cBO}	-	-	0.5	μA	V _{CB} =50V
Emitter cutoff current	I _{EBO}	-	-	0.5	μA	V _{EB} =4V
Collector-emitter saturation voltage	V _{CE(sat)}	-	-	0.3	V	I _c /I _B =10mA/1mA
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 _i	7	10	13	kΩ	-

*Transition frequency of the device.

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●Package, marking, and packaging specifications

Type	EMG4	EMH4	UMG4N	UMG7N	UMH4N	UMH8N	FMG4A	FMG7A	IMH4A	IMH8A
Package	EMT5	EMT5	UMT5	UMT5	UMT6	UMT6	SMT5	SMT5	SMT6	SMT6
Marking	G4	H4	G4	G7	H4	H8	G4	G7	H4	H8
Code	T2R	T2R	TR	TR	TN	TR	T148	T148	T110	T108
Basic ordering unit (pieces)	8000	8000	3000	3000	3000	3000	3000	3000	3000	3000

●External dimensions (Units : mm)

