

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







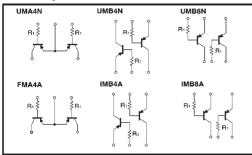
General purpose (dual digital transistors)

UMA4N / UMB4N / UMB8N / FMA4A / IMB4A / IMB8A

Features

1) Two DTA114T chips in a UMT or SMT package.

●Circuit diagrams



●Absolute maximum ratings (Ta=25°C)

	Parameter		Limits	Unit	
Collector-b	Collector-base voltage		-50	V	
Collector-e	mitter voltage	VCEO	-50	V	
Emitter-bas	se voltage	VEBO	VEBO -5		
Collector c	Collector current		-100	mA	
Power	Power UMA4N/UMB4N/UMB8N dissipation FMA4A/IMB4A/IMB8A		150 (TOTAL)	*1 mW	
dissipation			300 (TOTAL)	*2	
Junction te	Junction temperature		150	°C	
Storage temperature		Tstg	-55~+150	°C	

^{*1 120}mW per element must not be exceeded *2 200mW per element must not be exceeded

Package, marking, and packaging specifications

Part No.	UMA4N	UMB4N	UMB8N	FMA4A	IMB4A	IMB8A
Package	UMT5	UMT6	UMT6	SMT5	SMT6	SMT6
Marking	A4	B4	B8	A4	B4	B8
Code	TR	TN	TR	T148	T110	T108
Basic ordering unit (pieces)	3000	3000	3000	3000	3000	3000

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown voltage	ВУсво	-50	_	_	V	Ic=-50 μA	
Collector-emitter breakdown voltage	BVceo	-50	_	_	V	Ic=-1mA	
Emitter-base breakdown voltage	BVEBO	-5	_	_	٧	IE=-50 μ A	
Collector cutoff current	Ісво	_	_	-0.5	μΑ	V _{CB} =-50V	
Emitter cutoff current	IEBO	_	_	-0.5	μΑ	V _{EB} =-4V	
Collector-emitter saturation voltage	VCE(sat)	_	_	-0.3	V	Ic/Is=-10mA/-1mA	
DC current transfer ratio	hre	100	250	600	_	VcE=-5V, Ic=-1mA	
Transition frequency	fτ	_	250	_	MHz	Vc=-10V, le=5mA , f=100MHz	×
Input resistance	R ₁	7	10	13	kΩ	_	

^{*} Transition frequency of the device.

(96-448-A114T)

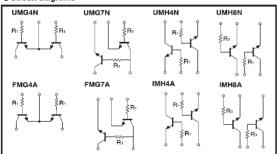
General purpose (dual digital transistors)

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

Feature:

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

Circuit diagrams



●Absolute maximum ratings (Ta=25°C)

Parameter		Symbol	Limits	Unit			
Collector-base voltage		Vceo	50	V			
Collector-emitter voltage		Voso	50	V			
Emitter-bas	se voltage	VEBO	5	V			
Collector co	Collector current		100	mA			
Power	UMG4N,UMG7N,UMH4N	Pd	150 (TOTAL)	mW	*1		
dissipation FMG4A,FMG7A,IMH4A,IMH8A		Pu	300 (TOTAL)	TTIVV	*2		
Junction temperature		Tj	150	J,			
Storage temperature		Tstg	-55~+150	J.			

^{\$1 120}mW per element must not be exceeded \$2 200mW per element must not be exceeded

Package, marking, and packaging specifications

Part No.	UMG4N	UMG7N	UMH4N	UMH8N	FMG4A	FMG7A	IMH4A	IMH8A
Package	UMT5	UMT5	UMT6	UMT6	SMT5	SMT5	SMT6	SMT6
Marking	G4	G7	H4	H8	G4	G7	H4	H8
Code	TR	TR	TN	TR	T148	T148	T110	T108
Basic ordering unit (pieces)	3000	3000	3000	3000	3000	3000	3000	3000

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-base breakdown voltage	ВУсво	50	_	_	V	Ic=50 μ A
Collector-emitter breakdown voltage	BVceo	50	_	_	V	Ic=1mA
Emitter-base breakdown voltage	BVEBO	5	_	_	V	IE=50 μ A
Collector cutoff current	Ісво	_	_	0.5	μΑ	VcB=50V
Emitter cutoff current	lebo	_	_	0.5	μA	VEB=4V
Collector-emitter saturation voltage	VCE(sat)	_	_	0.3	V	Ic/Is=10mA/1mA
DC current transfer ratio	hre	100	250	600	_	VcE=5V, Ic=1mA
Transition frequency	f⊤	_	250	_	MHz	Vce=10V, le=-5mA , f=100MHz *
Input resistance	Rı	7	10	13	kΩ	_

^{*} Transition frequency of the device.

(96-411-C114T)

