Emitter common (dual digital transistors) UMA3N / FMA3A

Features

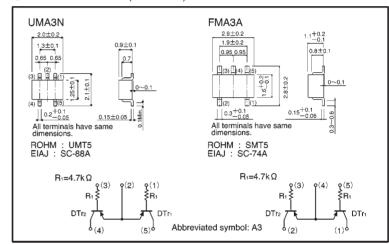
- Two DTA143Ts in a UMT or SMT package.
- Mounting cost and area can be cut in half.

Structure

Epitaxial planar type PNP silicon transistor (Built-in resistor type)

The following characteristics apply to both DTr₁ and DTr₂.

●External dimensions (Units: mm)



● Absolute maximum ratings (Ta = 25°C)

Parameter		Symbol	Limits	Unit
Collector-base voltage		Vсво	сво —50	
Collector-emitter voltage		Vceo	-50	V
Emitter-base voltage		VEBO	- 5	V
Collector current		lc	lc —100	
Collector power dissipation	UMA3N	Pc	150 (TOTAL)	mW *1
	FMA3A	FC	300 (TOTAL)	*2
Junction temperature		Tj	150	°C
Storage temperature		Tstg	-55~+150	°C

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

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

Transistors UMA3N / FMA3A

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown voltage	ВУсво	-50	_	_	٧	Ic=-50 μA	
Collector-emitter breakdown voltage	BVceo	-50	_	_	٧	lc=−1mA	
Emitter-base break down voltage	ВУево	-5	_	_	٧	$l = -50 \mu A$	
Collector cutoff current	Ісво	_	_	-0.5	μΑ	V _{CB} =-50V	
DC current transfer ratio	hfE	100	250	600	_	VcE/Ic=-5V/-1mA	
Emitter cutoff current	ІЕВО	_	_	-0.5	μΑ	V _{EB} =-4V	
Collector-emitter saturation voltage	VCE(sat)	_	_	-0.3	٧	Ic/I _B =-5mA/-0.25mA	
Transition frequency	fτ	_	250	_	MHz	Vc=-10mA, I==5mA, f=100MHZ *	
Input resistance	R ₁	3.29	4.7	6.11	kΩ	_	

^{*} Transition frequency of the device

Packaging specifications

	Packaging type	Taping	
	Code	TR	T148
Part No.	Basic ordering unit (pieces)	3000	3000
UMA3N		0	_
FMA3A		_	0

Electrical characteristic curves

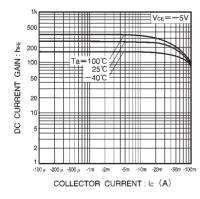


Fig.1 DC current gain vs. collector current

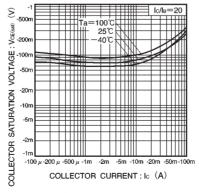


Fig.2 Collector-emitter saturation voltage vs. collector current